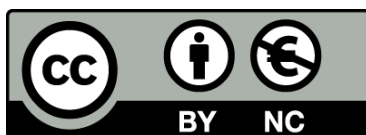




UNIVERSITAT<sup>DE</sup>  
BARCELONA

## Barcelona: Small-Scale Public Spaces

Marie El Haddad



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Programa de Doctorado Espacio Público  
y Regeneración Urbana.  
Arte, Teoría, Conservación del Patrimonio  
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# Barcelona: Small-Scale Public Spaces

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## Abstract

Small-scale public spaces form an essential part of Barcelona's urban development. During the beginning of the democratic era, Oriol Bohigas began the reconstruction of the city by creating small-scale public spaces of quality with the purpose of "higienizar el centro y monumentalizar la periferia". They were applied in all the districts of Barcelona, with the intent of compensating for the loss of open spaces and segregation caused during the dictatorship. Thus, the city gained a series of small public spaces that recovered its urban fabric and provided a better quality of life and coexistence.

The means of creating these small-scale public spaces is through the 'esponjamiento' of the urban fabric, that involved a selective destruction of specific deteriorated sites and the redevelopment of residual spaces.

The study of the historic framework of these operations in Barcelona demonstrates that the creation of small public spaces through 'esponjamiento' is attributed to the GATCPAC's sanitation plan for the old town, and the interventions of Adolf Florensa in the city.

This method originated from the concerns of urban hygiene in the 19th century. European industrial cities were suffering from epidemics, overpopulation and insalubrity, and the first measures of urban hygiene were through the 'eventrement' of the city, opening it up with large straight axes that crossed through its urban fabric eliminating everything in their path.

In Barcelona, the first initiative was by tearing down its walls and expanding into the Plain. Ildefons Cerdà drafted his expansion plan focusing a great deal on hygiene and ventilation and provided the blocks in his grid with small-scale interior courtyards.

As for the old town, early measures were taken through the 'eventrement' of the old fabric initially proposed by Cerdà and later redeveloped by Àngel Baixeras. Thus, began the opening of the Via Laietana that resulted in the loss of large amounts of historic and monumental buildings.

From that moment, the creation of small-scale public spaces through 'esponjamiento' was born as an alternative solution to large-scale demolitions and expropriations. And thanks to this procedure Barcelona gained a network of small-scale public spaces that still play an important role in our present day.

Keywords: Public space, urban design, small-scale, squares, gardens, selective destruction

## Resumen

Los espacios públicos de pequeña escala forman una parte esencial del desarrollo urbano de Barcelona. Al inicio de la era democrática, Oriol Bohigas empezó la reconstrucción de la ciudad creando espacios públicos de pequeña escala pero de gran calidad con el objetivo de “higienizar el centro y monumentalizar la periferia”. Estas intervenciones tuvieron lugar en todos los distritos de Barcelona, intentando así compensar la pérdida de espacios abiertos y la segregación causada durante la dictadura. De esa forma, la ciudad ganó una serie de espacios públicos de pequeña escala que contribuyeron a recuperar el tejido urbano y mejoraron la calidad de vida y la coexistencia.

El medio para crear dichos espacios públicos de pequeña escala es el “esponjamiento” del tejido urbano, que implicaba una selección destructiva de zonas específicas deterioradas así como del desarrollo de espacios residuales.

El estudio del marco histórico de estas operaciones en Barcelona demuestra que la creación de espacios públicos de pequeña escala a través del “esponjamiento” es atribuido al plan de higiene para la ciudad vieja de GATPAC y a las intervenciones de Adolfo Florensa en la ciudad.

Este método tuvo su origen en la preocupación por la higiene urbana del siglo XIX. Las ciudades industriales europeas sufrían de epidemias, sobrepoblación e insalubridad general. Las primeras medidas de higiene urbana se llevaron a cabo a través del “eventrement” de la ciudad, abriendo largos ejes rectos que cruzaban el tejido urbano eliminando todo a su paso.

En Barcelona, la primera iniciativa implicó la destrucción de las murallas y la extensión hacia el Llano. Ildefons Cerdà esbozó su plan de expansión centrándose en gran parte en la higiene y la ventilación y equipando los diferentes bloques de jardines interiores de pequeña escala.

Con respecto a la ciudad vieja, se tomaron una serie de medidas iniciales mediante el “eventrement” del tejido antiguo propuesto inicialmente por Cerdà y luego reedificado por Àngel Baixeras. De esta forma, se empezó con la apertura de la Via Laietana que resultó en la pérdida de grandes cantidades de edificios históricos y monumentales. Desde ese momento, la creación de espacios públicos de pequeña escala mediante el “esponjamiento” se constituyó como una solución alternativa a las demoliciones y expropiaciones a gran escala. Y Gracias a este proceso, Barcelona ganó una red de espacios públicos de pequeña escala que todavía juegan un rol importante a día de hoy.

Palabras clave: espacios públicos, diseño urbano, pequeño formato, plazas, jardines, esponjamiento

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## 0. Introduction

This thesis centers on the creation of small-scale public spaces in Barcelona that played an important role in its urban reconstruction throughout its different urban stages.

The road to Barcelona's recovery was through these small operations that became an essential part of 'hacer ciudad' ventilating the city and mending the periphery providing the citizens with a better quality of life. The study of these spaces allowed us to go deeper into the roots of their origins and evolution and into the hygiene problems of the 19th century Industrial city.

In the first half of the 19<sup>th</sup> century and the Industrial Revolution, European cities were faced with health problems brought upon them by the rapid growth of industries and the waves of immigration from rural areas. As a consequence, cities, especially their historic center, were exhausted with: population growth, over-crowdedness, and poverty; lack of space in the walled cities; shortage of dwellings and housing problems; poor management of water supply; lack of open green spaces; inadequate city layouts in relation to wind, ventilation and sunlight; and the presence of industries and their emanations. All of which caused hygiene problems that lead to various epidemics which opened the way for preventive municipal health legislations.

To improve hygiene conditions, one of the first measures taken was through major urban developments.

London addressed its hygiene problem through constructing a massive sewage system under the direction of engineer Joseph Bazalgette and increasing the number of squares and parks opening many of them to the public.

As for Paris, it went through a radical transformation under the hands of Haussmann by eliminating its unhealthy areas through opening large rectilinear and longitudinal streets. With this 'eventrement' strategy he was highly criticized for first, over-passing the budget and second, for the amounts of destructions it caused, despite the fact that he was proceeding with what was originally proposed by Napoleon I and initiated by Comte de Rambuteau. Taking advantage of the transformations, the famous promenades of Paris were created, including a number of squares and emblematic buildings with the purpose of embellishing the city. The designs and urban elements of Alphand, Barillet-Deschamps, Davioud, and Hittorff, among others, were standardized and systematized becoming an urban model and influencing the cities' urban design.

Centering on Barcelona, which is the main objective of this thesis, allowed us to explore its urban hygiene in more details prompted from the necessity to demolish the walls suffocating the old town (1854) to Cerdà's expansion into the Barcelona Plain.

Through his 1959 'Proyecto de Reforma y Ensanche de Barcelona' Cerdà aspired to modernize the city and the urban practice through a 'scientific' discipline with the aim of controlling urban growth and adapting the city to new economic and administrative structure; connection and transportation needs; a sewage system –upon which Garcia



Fària based his sewage system plan in 1891–; and hygiene requirements. Moreover, he focused on the importance of public spaces in the city and drafted his *vias* and *intervias* accordingly providing interior courtyards to every block in the grid. Nonetheless, with the increase in Barcelona’s population and aggregation of the neighboring towns, the Eixample was not built according to his original plan and became consolidated and the interior courtyards disappeared.

Thus, in 1907 Jaussely’s plan was approved with the intent to improve the Eixample’s connection to those neighboring towns. Within the plan, Jaussely proposed a system of parks and open space. However, his plan was not executed and was modified into a reduced version, that of 1917. This moment coincided with the preparations for the 1929 Universal Exposition, where Barcelona gained a series of new parks and gardens attributed to the projects of Forestier and Rubió i Tudurí that, more or less, compensated for the consolidation of the Eixample.

Moving from the new city to the historic Old Town the investigation goes back in time to study the early intents of urban hygiene, –before the demolition of its walls –where its first small-scale public spaces were created after the Royal Decrees that ordered the exhumation of cemeteries as well as the confiscation of monastic properties.

Nevertheless, the old town’s interior reform was approached differently. Cerdà proposed a plan of interior reform, by projecting three arteries crossing through its fabric in a straight line. In other words another ‘eventrement’ procedure similar to Haussmann’s in Paris. Those arteries reappeared in Baixeras plan in 1879 under the names of Via A, B, and C, and after being approved in 1881 resulted in the opening of the Via A, known as Via Laietana (1908-1958).

Due to the amount of destructions and expropriations the Via Laietana caused, it raised an awareness on the damages of ‘eventrement’ on the historic fabric; it triggered a search for the lost heritage and a need for conservation, –thus the creation of the Gothic Quarter– and generated the application of an alternative procedure, known as ‘esponjamiento’, that reformed the city through small-scale selective destruction rather than large rectilinear arteries. It is a strategy proposed by the GATCPAC’s Sanitation Plan in 1932, and Giovannoni’s Diradamento theory in the 1930s.

Meanwhile, the other *vias* were revised in several plans (Darder, Vilaseca) but they were not approved. On the other hand, Florensa and Vilaseca, through the ‘Servicio para la Conservación y Restauración de Monumentos’ created in 1927, were collaborating with Duran i Sanpere, and the ‘Servicio de Parques y Jardines’ in recreating the Gothic Quarter. Inspired by Giovannoni’s theory and the GATCPAC’s plan, Florensa carried out the ‘esponjamiento’ operations throughout the old town. Thus, it gained a series of small-scale public spaces, ventilating it, and adding value to its surroundings and its historic and artistic monuments.

With the dictatorship and the Porciolismo, Barcelona became a victim of uncontrollable growth, speculation, and increase in population that led to the appearance of slums, housing and industrial estates, and the loss of many open spaces resulting from the Plan Comarcal and its partial plans. In spite of the alternative priorities of the Gran Barcelona during the decades of the 50s, 60s, and 70s, the Department of Parks and Gardens managed to create numerous parks and small-scale public spaces, though a few, complemented with important works of sculptures generated through the City Council's public art policy.

The end of the dictatorship marked the rise of social movements reclaiming public spaces, as well as the approval of the PGM in 1976 along with its special plans (PERI) for every neighborhood in the city. The road to Barcelona's recovery in the democratic era began in the 1980s with Bohigas who converted the lands, acquired by Mayor Socias (1976-1979) in the "Transition" period, into public spaces and equipments.

The reconstruction of Barcelona began by creating and renewing small-scale public spaces that became a new strategic method of "city making" under Bohigas's concept of *"higienizar el centro y monumentalizar la periferia."* In other words, the 'esponjamiento' once again and the small-scale-public spaces playing an important role in restructuring and regenerating the historic center and the periphery. These punctual and strategic public spaces played a positive role in maintaining the essential formal structures of neighborhoods, enhanced their character, and positively affected their surroundings creating, as Bohigas stated, a 'metastatic' effect. With the upcoming Olympic Games in 1992, Barcelona's recovery and regeneration process was accelerated and a large number of public spaces were restored and created in the various districts of Barcelona.

Despite the change of scale during the 1992 Olympic Games and the post-Olympic era, creation of small-scale public spaces persisted providing each neighborhood a series of spaces of quality and coexistence.

The city has become friendlier due to the quality of these public spaces or acupuncture points. They had created a valuable image of the city, improved the citizens' quality of life, provided greater social cohesion, identity and dignity and a strong positive relationship between the city and its people

This process helped in defining the functions of the city and its centrality; in rehabilitating the historic center 'Ciutat Vella'; in revalorizing the Eixample; and remodeling the peripheral neighborhoods.

## **Thesis Structure**

Chapter 1 gives a general reading on the problems of urban hygiene in the Industrial city that led to new health legislations and the first projects of urban developments with the purpose of creating healthier cities. Measures were taken in all European cities, like the innovative sewage system in London; Haussmann's transformation of Paris through the

‘eventrement’ taking advantage of the demolitions to embellish and modernize the city; and Barcelona’s first steps in tearing down its walls and expanding towards its vast Plain.

Chapter 2 delves into Cerdà’s Ensanche Plan that he drafted after ‘scientifically’ approaching the urban planning of the city, and taking into consideration its orientation and typography before he drafted his grid of *vias* and *intervias*. While doing so he paid attention to creating public spaces reflected in the block’s interior courtyards. This chapter proceeds in discussing the later years of aggregation of the old towns, the problems of their connection to the Eixample, an overlook on Jaussely’s interconnection plan reaching the consolidation of the ensanche. This line of structure is made to demonstrate that in the late 19th, early 20th century, the Eixample suffered from lack of space and the interior courtyards were built, as opposed to Cerdà’s original plan, but in the meantime with the works of Forestier and Rubió i Tudurí for the 1929 International Exhibition the city gained a number of parks and small-scale squares and gardens.

Chapter 3 focuses on the Old Town, thus goes back in time before the demolition of the walls to cast light on the early intents of urban hygiene, that of the Royal Decree to eliminate cemeteries and the confiscation of monastic property, which gave the historic center its first series of small-scale squares. From then on it moves to Cerdà’s Plan for the interior reform passing rapidly through the opening of the first axes and Garriga i Roca’s plan. The purpose of the study and analysis is to demonstrate that Cerdà’s proposal with the three axes were also demonstrated in Baixera’s plan as Via A, B, and C and consisted of an ‘eventrement’. The chapter discusses the opening of the Via Laietana, the devastating demolitions and consequences of its opening, the various revisions of Baixeras plan –Darder, Vilaseca, (and later the Plan de Ordenación del Casco Antiguo 1959) which were not applied–, in order to emphasize on; first, the awareness for the loss of heritage, thus the creation of the Gothic Quarter; second the formation of the ‘Servicio para la Conservación y Restauración de Monumentos’ and the collaborations of Florensa and Vilaseca; third, the ‘esponjamiento’ suggested by the GATCPAC in their sanitation plan and Gionvannoni’s Diradamento theory in the 1930s that influenced Florensa who in his turn continued the old town’s interior reform by creating small-scale public spaces. The first set of ‘casos de trabajo’ or case examples (studies) are discussed starting from 1927, the moment the ‘Servicio para la Conservación y Restauración de Monumentos’ was created, passing through the Civil War until reaching the 1950s of the post-war era.

Chapter 4 continues where the latter left off focusing once again on the growth of the new city taking a different pattern than the old town. During the dictatorship, the city suffered from heavy flow of immigrants, slums and housing shortages. In 1953 the Plan Comarcal was drafted and from then on the city went through a chaotic growth of housing and industrial estates, road networks that cut through its fabric, and the loss of open green spaces. But at the same time, thanks to the Department of Parks and Gardens, various parks and small-scale public spaces were created in different parts of the city.

The chapter rapidly observes the Plan Director, the issues of the Metropolitan Area, before examining the end of Franco's era and Porcioles's mandate that led to the rise of neighborhood associations demanding and reclaiming their green public spaces and decent housings.

Chapter 5 focuses on the transition to democracy and the democratic era discussing the Plan General Metropolitana PGM and the special reform plans PERI before centering on Oriol Bohiga's reconstruction of the city that was once again through small-scale public spaces strategically created in both the center and the periphery improving their quality of life and regenerating their urban fabric. To maintain the context of this period, the chapter refers to the role the Olympic Games played in Barcelona's urban development by rapidly passing through the larger-scale projects leading up to the post-Olympic era. Subsequently, the recovery of Ciutat Vella, Eixample, and the periphery are discussed while demonstrating through maps and graphs their growth throughout the different periods of the democratic era.

Chapter 6 focuses on the second set of specific case studies, that corresponds to the democratic era, studying their evolution, creation, design and problems

## **1. Methodology and Context**

This doctoral thesis forms part of the research line 'Espacio Construido y Regeneración Urbana' of the PhD program Espacio Público y Regeneración Urbana: Arte, Teoría y Conservación del Patrimonio de la Universidad de Barcelona'

### **Objectives**

The main object of study is the small-scale public spaces in the districts of Barcelona with the main objective of demonstrating the important role played by the small-scale public spaces in the urban development of the city throughout its different stages in history. It embarks from the mid 19th century, focusing on the different circumstances that led to their existence with an approach to their creation and design.

In order to reach this objective, this research centers on:

1. Analyze the evolution of small-scale public spaces in Barcelona through a historical approach that makes us understand their origin, background and precedents
2. Identify the small-scale public spaces in the urban fabric.

3. Study exemplary and representative cases and analyze their design, shape, form, context and effects in their surrounding area

## Methodology

The methodology of this research is based on the implementation of different types of primary and secondary sources that permit to go deeper into the source as well as compensate for certain absences of information. The different consulted sources:

1. Municipal documents: through the consultation of documents published by the City Council, among them the 'memorias' or reports concerning urban plans and public spaces such as the 'Tinència d'Alcaldia' published throughout the years, as well as, the 'Anuario estadístico de la ciudad de Barcelona', and some 'Ordenanzas Municipales'.

2. Periodical publications that provided information about the public opinion concerning public spaces, as well as discovering detailed information and dates not provided by other resources, such as:

Daily newspapers, particularly the digital archives of 'Hemeroteca de La Vanguardia' and the 'Biblioteques Catalanes Antiques (ARCA)' where *La Veu de Catalunya*, and *La Catalunya* are available.

Specialized journals available in the digital archive of the 'Revista de Obras Públicas (ROP)', the 'hemeroteca digital de la Biblioteca Nacional de España (BNE)' as well as the archive of the 'Revistes Catalanes amb Accés Obert (RACO)' particularly *Quaderns de Arquitectura i Urbanisme* and the CR POLIS's *On the W@terfront*.

3. Photographic sources to visually support the research with images that complement the explanations of the text. Moreover, cartographic plans and geographic maps were consulted in order to understand the morphological evolution of the city and its public spaces throughout the years. This is achieved by consulting the Arxiu Fotogràfic de Barcelona (AFB), the Institut Cartogràfic i Geològic de Catalunya (ICGC), the Arxiu Nacional de Catalunya (ANC), the Arxiu Històric de la Ciudad (AHCB), as well as the archives of the different districts.

4. Consulting and using the geographic maps and tools provided by the City Council, CartoBCN, to locate the small public spaces and be able to generate the graphs and maps using as a tool the program QGIS.

5. Direct Observation of the concerned public spaces accompanied by a collection of data, concerning their design, material and uses, through photographic documentation, plans and sections. Many of which are based on information provided by the Universitat de Barcelona research center CR POLIS's, their masters program, and the author's masters

final project –based on the same subject– entitled ‘Small-Scale Public Interventions as Urban Acupuncture’ admitted in 2012.

## Context and Theoretical Framework

An interdisciplinary approach to the research has been necessary as in any research in the urban field. Therefore, we encountered the crossing and mixture of several disciplines from legislation and social matter to architecture, urbanism, public art and design.

The city is the public space (Habermas, 1993; Lynch, 1960; Jacobs, 1961; Lefebvre, 1973; Borja, Muxi, 2003), and public space is the key element regarding the urban, formal, social, and environmental aspects of the city forming an essential part of its structure and urban life (Borja, Muxi, 2003).

According to Borja, Muxi (2003), public space is an urban, political and cultural challenge.

1) Urban: It is an ordering and a structuring element of the urban region, an articulator for the city and a construction factor of the neighborhood. It organizes a territory that is capable of supporting different uses and functions.

2) Political: It is a space of community life, of collective expressions, encounters and daily exchanges. It is assimilated to the action of the community and reflects a political will and a proactive image of the institution. It is also a place of affirmation and confrontations, a place for social events and protests, *“se ha de ampliar el espacio público hasta el interior de los edificios políticos y administrativos que representan o ejercen poder sobre la gente. Como mínimo, hasta la planta baja”* (Borja, Muxi, 2003: 69).

3) Cultural: The cultural dimension of public space is *“socializar la centralidad de calidad y ‘monumentalizar las periferias’ descalificadas”* (Borja, Muxi, 2003: 69). This dimension is not only connected to monumentality or empty spaces but to all buildings, equipments and infrastructures of the city. Values, aesthetics, materials, colors, design, and quality are very important factors of this dimension making sure that they suite all tastes and aspirations to prevent exclusions. This dimension was thoroughly applied and taken care of in the modern Barcelona in order to produce spaces of high quality.

Public space is an indicator of quality, and this quality:

*“es un factor sintomático que se considere al espacio público no solamente como un indicador de calidad urbana sino que también como un instrumento privilegiado de la política urbanística para hacer ciudad sobre la ciudad y para calificar las periferias, para mantener y renovar los antiguos centros y producir nuevas centralidades, para suturar los tejidos urbanos y para dar un valor ciudadano a las infraestructuras”* (Borja, 1995: 9)

Two of most important aspects and basic elements of public urban spaces are the street and the square:

*“La ciudad es la calle y la plaza, son los lugares de ciudadanía, que crean y expresan el nivel de ciudadanía, de libertad e igualdad. La calle que nos lleva a los centros, la calle que articula la ciudad, que nos proporciona recorrido y escenario, la calle es función y es paisaje, “no es una carretera”. Y es la plaza, lugar relacional por excelencia, ordenador funcional y referente icónico, que puede maximizar la intensidad de la actividad económica y de la vida social. La calle y la plaza donde se expresa la ciudadanía colectivamente”* (Borja, 2009: 5).

This thesis is based on the study of small-scale public spaces that correspond in particular to the **square** and **garden** that in the city of Barcelona are studied in areas of fine grain morphology, and in areas of continuous traces or axes between party walls.

What is meant by **small scale** is the creation of these interventions according to the scale of the neighborhood, on the scale of the local and the urban project rather than the global and master plans. As for the other types of public spaces like parks, correspond to a different dimension category that of intermediate or mainly large-scale, for this reason they do not form part of this research.

Matters of scale and size in relation to public space has always been an issue thoroughly studied and analyzed by the likes of Blumenfeld (1953), Hall (1990), Lynch (1960, 1981), Whyte (1980), Gehl (2010-2011). Their approximation to scale is seen through the human dimension and the distances of objects in relation to one another and humans. Their analysis of this human-scale relationship is based on common criteria of human senses, field of vision, distances, accessibility, and comfort.

Blumenfeld discussed the “normal human” scale in contrast to the “grand and monumental scale” stressing on the importance of squares in articulating the urban fabric particularly when considering scale.

However, if it is a must to specify a size range for what is “small”, based on the research we could point out that the size of small squares and gardens falls between 50m<sup>2</sup> up to 1 hectare. And this variation in size depends on the location of the squares, whether in urban centers or in the periphery.

Gehl explains that “squares are rarely larger than 10000m<sup>2</sup> with the majority measuring 6-8000m<sup>2</sup> and many are much smaller” (Gehl, 2010: 38). And this depends much on whether they are geometrically square or rectangular.

In this thesis, they are the squares and gardens formed through ‘esponjamiento’ which is closely related to scale because it is mostly small in nature. It corresponds to partially or selectively destroying and converting damaged spaces into a public space.

Though a Spanish word, ‘esponjamiento’ is maintained throughout the thesis because it is the most precise term in describing and explaining the procedure itself. Its direct

translation to English is ‘sponging’, which in fact, has a different meaning and does not correspond to this research because it is attributed nowadays to ‘sponge cities’ as in cities that face water and flooding problems like in Rotterdam for example. Noting that some words are best kept in their original language like the ‘eventrement’ in French or ‘diradamento’ in Italian.

Concerning this selective demolition Busquets (2003) identified six suggestions of interventions from which five corresponds to the public spaces we are researching:

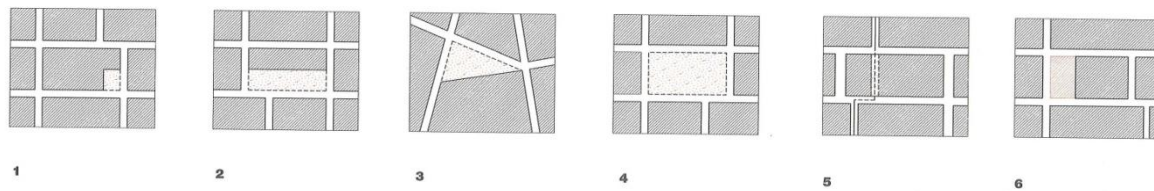


Fig.0 Busquet’s different types of selective destruction in the city’s morphology (Busquets, 2003)

*“1. **Specific elimination of buildings aligned along a street.** With a view to creating new public space by means of selective demolition of buildings.*

*2. **Elimination of building in parts of a street block to create “row” buildings.** Similar to the last case, but referring to street blocks built in “rows”. The intervention consists in the entire elimination of one of the rows in order to create an extension or a small square in the street.*

*3. **Selective asymmetric recess.** In this case, the demolition of part of the street block is accompanied by a new building which represents the front giving onto the public space.*

*4. **Selective evacuation of entire street blocks.** Possible application to the densest, least salubrious and most conflictive [areas].*

*5. **Openings to give continuity to pedestrian routs.** To create greater permeability of fabrics in places which are insufficiently connected with the exterior and/or adjacent fabrics. They could take the form of the demolition of a plot or the adaption of the building’s ground floor to allow pedestrians to walk through.”*

*6. As for the last type according to Busquets, is the “introduction of local services and amenities” (Busquets, 2003: 197),*

which we could replace or add a 7<sup>th</sup> point that corresponds to various examples in the old centers but mostly in the peripheral neighborhoods, that is of, converting small ditches or residual space into equipped public spaces to articulate the continuity of a neighborhood’s fabric and provide the dwellers a place of quality.

The main case studies in the thesis or ‘casos de trabajo’ are operations of ‘esponjamiento’. They are ‘casos de trabajo’<sup>1</sup> (A) supported by secondary examples (B). Among Florensa’s

<sup>1</sup> Referring by that to the doctoral thesis of J.P Costa (2007) where the ‘caso de trabajo’ allows introduction of contrasts and qualifications



interventions three main squares are selected: Plaça Berenguer el Gran: one of the first squares to be created after the opening of the Via Laietana and its process became a model for the rest. Plaça Sant Felip Neri: because of Florensa's meticulous work in recreating the square and particularly the facades of the buildings surrounding it. Plaça de la Vila de Madrid: where archeological findings played an important role in the formation of the square.

In all these cases the focus on aesthetics, monumentality, archeology, and re-creation reflects the urban design process of that period.

Among the interventions initiated within the program designed by Bohigas two squares are selected: Fossar de les Moreres: for being throughout its history a place of memory, identity, and politics carefully designed after passing through several changes. Plaça Can Robacols: one of the first squares to be totally remodeled due to the incompatibility of its design in relation to its use and surroundings.

The cases are approached through analyzing their physical evolution in a historic context and different circumstances that played an important role in determining their creation, shape, form and design which in return caused certain and different effects on their surroundings.

The **square** is characterized by its form, shape, design and importance in both the historic and modern city and has always been a constant ground of study and analysis.

One of the most important elements of city design is the square. The, *plaza*, *plaza*, *place*, *praça* and *piazza*, originates from the Latin word 'platea' that is used to identify a public space with a special character and morphology distinct from the channel-like spaces of the streets. By nature they are an urban quality prerequisite and a spatial support for civic institutions dating back to the Greek agora and Roman forum.

The square is a multipurpose meeting space where the traditional city's fundamental social activities take place. Its design has to be resistant, and its center must be open to host a series of multifunctional elements and indispensable street furniture. Its form, importance and identity, no doubt, depend on its location and the facades of its surrounding buildings that add to its value. It is a place for civic, social and leisure activities; a place of rest; a shortcut within the busy street network; and most important it is a place to heal and let the city breath. It is a node of activity, the junction of many paths; it is the centre or the portal of a district, town or city (Lynch, 1960). It is a symbolic space and a location to appreciate the finer points of city embellishment through the public art it may contain; the important surrounding buildings, ornaments; fountains; street furniture; materials and design. Squares create more intimate places for sitting or dining and provide a space into which commercial and neighborhood activity can spill out. They provide their neighborhood with sunlight, hygiene, comfort, benches, terraces, potable fountains, even public art, and children's playgrounds which is one of their main characteristics.

*"Its hierarchical superiority is evident in any type of fabric, not only due to the functions it supports but also due to the finite nature of its space, its relative size or quality of its architecture regardless of the origins behind its shape" (Dias Coelho, 2007: 19).*

Alberti (1886) stressed on the fact that *"...there ought to be several squares laid out in different parts of the city, some for the exposing of merchandises to sale in time of peace; and others for the exercises proper for youth; and others for laying up stores in time of war..."* (Moughtin, 2003: 87).

Sitte (1889), advocated a "picturesque" approach to squares in a pictorial sense appropriate to the scale of people, and derived a series of artistic principles, like that of: enclosure which to him is the prerequisite of the square and the primary feeling of urbanity; the shape and width of squares where unsymmetrical irregular shaped plazas enhanced the identity of a space, stimulating interest and augmenting the picturesque quality of the tableau.

Zucher (1959) in his turn discussed "artistically relevant" squares which represented "organized" and contained spaces. He distinguished five archetypal forms: the closed square interrupted only by the streets leading into it and exhibiting regular geometric forms and repetition of similar buildings or façade-types around the perimeters; dominated characterized by a building or group of buildings towards which the space is directed and to which all surrounding structures are related., nuclear formed around a central feature that is sufficiently powerful to create a sense of space around itself, and grouped squares units grouped around a dominant building; and the amorphous square unlimited formless square.

To Cullen (1961) the square is a quadrangle protected from all but local traffic. He also studied the different types of squares arranging them into private, public, enclosed and popular squares where visual appeal and pedestrian priority are essential.

Concerning diversity and the use of squares, the success of small plazas is related to the diversity of users, activities, and elements in and around the square (Whyte 1980, Gehl 2010, 2011; Jacobs, 1961). Several factors determine their level of use including their location, climate, time of day, accessibility, as well as urban elements and furniture where water, shade, and seating areas are elements to be considered in a square.

To Cerdà squares are places of rest, places for commerce, and spaces of circulation, health and pleasant distractions

*"[...] las ciudades no deben carecer de plazuelas para el descanso momentáneo de la gente que esté fatigada ó se tenga que aguardar, plazas para poderse reunir un número suficiente de individuos à tratar de sus negocios particulares, jardines donde poder encontrar salud y agradable distracción, plazas ó mercados públicos donde poder hacer todo género de acopios bien sea de los artículos de primera necesidad y de uso domestico, ya también para la compra de los que puedan ser de puro lujo, y deben tener también comunes y orinales*

*públicos decente y cómodamente arreglados en sitios destinados al efecto” (Cerdà, 1859: 384).*

According to Florensa, they accompany and complement old buildings better than the new ones with their smooth surfaces and aggressive angles –an issue that also concerned Giovannoni– thus, urban gardens provided more aesthetic harmony.

The creation of gardens along with the heritage and archaeological revelations played an essential part in the development of public space projects in the historic fabric. These interventions made possible the creation and opening of small spaces in the congested old town that changed and improved its quality of life and image for its dwellers as well as its visitors.

And monuments and small gardens is a combination that Florensa praised for their aesthetic qualities:

*“es nuestra firme opinión que el tipo más refinado de jardín urbano, el de cualidades estéticas más elevadas, es el que acompaña y rodea a los monumentos que nos han legado los tiempos que fueron. Las viejas piedras y la vegetación suele decirse que se complementan; pero este es decir poco, pues en realidad cada uno de estos elementos experimenta por la vecindad del otro una multiplicación asombrosa de su propia calidad” (Florensa, 1954: 2).*

To Bohigas, squares

*“Son elementos indispensables, que ejercen una evidente fuerza centrípeta en las diversas comunidades. En Barcelona, por ejemplo, se podría estructurar la historia de los núcleos sociales y de los cambios en la formalización arquitectónica a partir de análisis de las plazas. Sin llegar a tanto, intentaré un resumen esquemático de las plazas barcelonesas para hacer de ellas una clasificación que permita entenderlas y juzgarlas” (Bohigas, 1986: 84).*

In Barcelona squares are not defined by their geometrical forms and dominating architecture that corresponds to the Baroque models of Paris, such as Place des Vosges, except for Plaça Reial, Plaça Sant Jaume, Plaça Sant Josep, Plaça del Mercadal de Sant Andreu, Plaça Sant Miguel del Port and Portal del Mar that tend to correspond to these models with their uniform architectonic facades (Bohigas, 1986).

Due to that, many have complained that the city lacks good squares to which Bohigas responded:

*“olvidan que, con las excepciones citadas, Barcelona responde a otro tipo de plazas: las de los Campi venecianos, del Graben de Viena, de la Piazza delle Erbe de Verona. Y si no fuera porque la distancia en calidad de excesiva, diríamos también que responde al de muchas plazas romanas como la Navona –donde la forma es consecuencia de una huella arqueológica unida a una reinterpretación contradictoria y atrevida, pero adecuada a la continuidad de la trama urbana- o la serie de espacios que rodean Santa María supra Minerva o la plaza de San Bernardo, con una arquitectura que emerge aparentemente*

*insolidaria pero fruto de un proceso armónico de vaciado y remendado"* (Bohigas, 1986: 40).

# **1** OVERVIEW ON THE INDUSTRIAL CITY AND URBAN HYGIENE

In the first half of the 19<sup>th</sup> century cities were faced with health problems among other issues as repercussions of the Industrial Revolution. As a consequence the cities especially their historic center was exhausted with overcrowding, poverty, lack of fresh water and hygiene that lead to various epidemics which opened the way for preventive municipal health legislations.

*“Hygiene and sanitation were not unknown in other civilizations: what community could have survived the ordeal of close permanent quarters without a certain respect for their law? But in our new biotechnic economy hygiene occupies a commanding place: not (421) merely does it mean public defenses against disease: it means taking positive steps to make the whole environment favorable to health, animal joy, and length of days” (Mumford, 1970: 421, 422).*

The main urban reformations and hygiene, in major cities in Europe, were performed during and after the Industrial Revolution in the 19<sup>th</sup> century. Cities and their urban centers were faced with health problems brought upon them by large waves of immigration in search of work, and rapid growth of industries, factories, heavy transports and mines. This resulted in overcrowded and dense urban centers, poor housing and living conditions, and lack of space. Heavy industries settled in inappropriate spaces for maximum benefits disregarding the city’s urban fabric and natural surroundings. Immigrants flooding from rural areas for a better life resided in neighborhoods that lacked infrastructures, equipments, sunlight, fresh water and sanitation. They lived in cheap, congested, unventilated, and unhealthy housings, many of which shared by several families and this caused excessive labor force, hunger, poverty and high mortality rates. *“The provision of housing for the lower classes becomes the major problem that will endure, in different waves, along the nineteenth century until today” (Remesar, 2016: 2).*

As a repercussion they became cities of breeding grounds for the massive spread of disease, and hence the disastrous arrival of the 19<sup>th</sup> century epidemics:

*“Partly, the nineteenth century interest in hygiene and sanitation was an automatic reaction: compensation against the miserably insanitary conditions, the devitalized diet,*

*the constant state of ill-health and enfeeblement, in which the denizens of the nineteenth century towns lived. Advances in the biological sciences, in turn, threw into relief the misdemeanors of the new environment: its lack of sunlight and ultra-violet rays, its frequently infected public water supply, its wholesale materialization of conditions favorable to organic dissipation, physiological maladjustment, and disease.*

*Modern hygiene has established the fact that most of our cities, not least those big ones built mainly during the last fifty years, are biologically speaking life-inimical or life-destructive environments<sup>2</sup>" (Mumford, 1970: 422)*

The drastic situation was depicted in many literature works such as Honoré de Balzac's *Scènes de la vie parisienne* in *La Comédie Humaine* (1829-1855), Victor Hugo's *Les Misérables* (1862), Charles Dickens's *Oliver Twist* (1838), and later Jack London's description of London's East End in *The People of the Abyss* (1903) influenced by Jacob Riis's *How the Other Half Lives* (1890), Charles Booth's *Life and Labour of the People in London* (1892), and Friedrich Engels's *The Condition of the Working Class in England in 1844* (1845). This brings us to another outcome, the situation induced the rise of a new class, the middle class, and thus class struggles and clashes started between the fast-growing working class and the new bourgeoisie that took political and economical power and affected all the sectors including the urban development of cities. The situation was in crisis and threatened by riots and revolutions like in the case of Paris:

*"Consider, first, the case of Second Empire Paris. The year 1848 brought one of the first clear, and European-wide, crises of both unemployed surplus capital and surplus labour. It struck Paris particularly hard, and issued in an abortive revolution by unemployed workers and those bourgeois utopians who saw a social republic as the antidote to the greed and inequality that had characterized the July Monarchy. The republican bourgeoisie violently repressed the revolutionaries but failed to resolve the crisis. The result was the ascent to power of Louis-Napoleon Bonaparte, who engineered a coup in 1851 and proclaimed himself Emperor the following year. To survive politically, he resorted to widespread repression of alternative political movements. The economic situation [capital surplus] he dealt with by means of a vast programme of infrastructural investment both at home and abroad" (Harvey, 2008: 25).*

According to Remesar "the main reason for this disastrous situation" is due to "the underlying problems of immigration, exploitation of labour and the desire for capitalist profit" (Remesar, 2016: 2) which Engels thoroughly described during his visit to England in the 1840s. Stressing on the fact that the hygiene situation was closely the same in France and Germany, Engels revealed the panorama of misery and class oppression that he observed

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<sup>2</sup> Mumford made clear the importance of one's style of living, surroundings and living conditions that largely affected one's health: "By his researches in bacteriology Pasteur altered the conception of both the external and the internal environment of organisms; and with the progress of medicine, physicians turned attention from the noting of symptoms to the analysis of causes, from a one-sided readjustment of the organism through medication or surgery, to a many-sided readjustment that includes diet, habitation, regimen, social and psychological relations" (Mumford, 1970: 422).

in England and the disturbing reality that the proletariat faced after moving into the cities. He speaks of the physical, social, and psychological challenges they faced after being accustomed to a free, independent, clean, and self-sufficient life in their villages. Between their hostile landlords and ruthless factory owners they faced a severe decline in living conditions, loss of independence and identity, hardships, alienation, fraud, scarcity, poverty, and insalubrity. The filthy environment with its lack in basic waste management, drainage, hygiene and ventilation subjected them to famine, diseases, and eventually death. He pointed out that for fear of being victims of epidemics, the British Bourgeois saw the urgent need to improve their cities. While criticizing the bourgeoisie he compared them to slave-masters and capitalist exploiters –comparing their situation to chattel slavery in America– holding the *“proletariat chained [...] in the factory system [that] ends all freedom in law and in fact. The operative must be in the mill at half-past five in the morning; if he comes a couple of minutes too late, he is fined; if he comes ten minutes too late, he is not let in until breakfast is over, and a quarter of the day’s wages is withheld, though he loses only two and one-half hours’ work out of twelve. He must eat, drink, and sleep at command.”* (Engels, 1845: 179).

The sheer awfulness of the situation became a serious object of study that went beyond mere descriptions and into conducting hygienic and medicinal studies, campaigns, and solutions to the diseases and mortality rates in cities, such as Parent du Châtelet (1824), Villermé (1830), Chadwick (1842), Monlau (1847), Chevalier (1848), Cerdà (1856; 1859), Mille (1866), Fonssagrives (1874), Ward-Richardson (1876), Proust (1877), Arnould (1881) among others.<sup>3</sup>

*“For this reason measures were taken in order to improve the bad conditions that the industrial revolution had brought and this paved the way for preventive municipal health legislations on all levels and sectors of sanitation and public health including new sewage and drainage systems”* (Remesar, 2016: 2).

What is significant is that hygiene was always an issue along the centuries but it is in the 19<sup>th</sup> century where one of the biggest and potent measures of hygiene –‘higienización’ in Spanish– was achieved through urban development and regeneration plans and projects to clean-up and modernize cities.

*“The pragmatic connections that the English and the French established between sanitation and urbanization involved a spatial generality: the overall urban layout [that*

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<sup>3</sup> Alexandre Parent du Châtelet’s *Essai sur les cloaques ou égouts de la ville de Paris* (1824); Louis René Villermé’s *De la mortalité dans les divers quartiers de la ville de Paris* (1830); Sir Edwin Chadwick’s *Report on the sanitary condition of the laboring population of Great Britain* (1842); Pere Monlau’s *Elementos de Higiene pública o Arte de conservar la salud de los pueblos* (1847) and later editions in 1862 and 1871; Louis Chevalier’s *Le Cholera. La premiere epidemie du XIX siècle* (1848); Ildefons Cerdà’s *Monografía estadística de la clase obrera Barcelona* and *Teoría de la Construcción de las ciudades*; Adolph Auguste Mille’s *Assainissement des villes* (1866); Jean Baptiste Fonssagrives’s *Hygiène et Assainissement des Villes* (1874); Benjamin Ward-Richardson’s *Hygeia A City of Health* (1876); Adrien Proust’s *Traité d’Hygiène* (1877) and later editions in 1881 and 1902; Jules Arnould’s *Nouveaux Éléments D’Hygiène* (1881) and later editions in 1889, 1895, 1900 and 1907.



*went] beyond fears of epidemics to affect the entire physical order of living in community in the city” (Solà-Morales M., 2010: 43, 44).*

Gómez Ordóñez while discussing the sewers of the 19th century added that: *“A technical relationship of servitude became a necessary work, and it was in this direction that the link was consolidated between sanitation in the form of sewers and the ideas of urban renovation and extension, urban business” (1992: 383).*

And as such, in the second half of the 19<sup>th</sup> century, large urban regeneration achievements began in many European cities such as in Paris, London, Naples, Marseille, Lyon, and Brussels, among others, often performed by the hands of the middle class. Many local authorities, under the name of ‘higienización’, took advantage of the developments to improve urban circulation, prevent riots and most importantly modernize their cities.

*“La transformació de les ciutats es realitza en primer lloc, puntualment, a través dels canvis tipològics introduïts amb la pròpia reedificació de les cases, de polítiques d’alineació de carrers i de múltiples intervencions puntuals, sovint sobre solars desamortitzats. A partir de la segona meitat del XIX comencen a proliferar les grans operacions de reform a remolc d’unes forces econòmiques en ascens i de l’acció modernitzadora dels nous estats nacionals. Londres i París exemplifiquen dos casos extrems” (Guàrdia, 2001: 32)*

### **A Look on the English Situation**

In Great Britain, several steps were taken, among these the setting of bodies such as the ‘Public Health Movement’ and the ‘Health of Towns Association’ formed on the 11<sup>th</sup> of December 1844 at a meeting in Exeter City Council. Its formation followed the establishment of the ‘Health of Towns Commission’ in 1843 directed by Sir Edwin Chadwick.<sup>4</sup> Later many branches of the association were formed in Edinburgh, Liverpool, Manchester, York, Halifax, Derby, Bath, Rugby, Marlborough, Walsall, Plymouth and Worcester. Many other associations were formed among them the ‘Metropolitan Association for Improving the Dwellings of the Industrial Classes’ and the ‘Association for Improving Cleanliness among the Poor’. Their purpose was gathering information and producing reports on poor and insanitary living conditions, and organizing public lectures for the purpose of putting pressure on the government to achieve legislative changes like the passing the ‘Public Health Act’ in 1848. Chadwick argued that the way to improve living conditions was through reform and that civil engineers were more needed than physicians to provide systems of drainage, sewers, garbage disposal, clean water, and housing regulations. From these deliberations emerged what became known as the ‘Sanitary Idea’ that resulted in improvements in health and well-being from the mid-19<sup>th</sup> century until the mid-20<sup>th</sup> century (Lewis, 1952; Ashton, 1991).

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<sup>4</sup> Sir Edwin Chadwick was an English social reformer known for his work on improving sanitary conditions, Poor Laws, and public health. In 1842 he published ‘Report into the Sanitary Conditions of the Labouring Population of Great Britain’.

In London, the construction of the first railways in 1836 and the opening or transformation of streets played a big role in cleaning the city. Many old unhealthy neighborhoods were demolished to be replaced by railways or wide streets especially between 1855 and 1897, during which time Paris was also busy with its transformation (Edwards, 1898). However, this fact created further major social problems because:

First, large numbers of people were displaced. H. J. Dyos (1955) estimated that the railways expelled 37,000 citizens between 1859 and 1867; second, before 1885 there were no regulation or obligation in allocating the displaced citizens; third, the demolitions contributed to the densification and insalubrity of the adjacent zones and suburban neighborhoods bringing the problems to other areas; and fourth, it caused London to lose a big number of its open spaces and “breathing-places” (Sexby, 1905).

Furthermore, London addressed its sanitation problem through constructing a massive sewage system under the direction of engineer Joseph Bazalgette. At the urging of Chadwick and the Royal Commission, the Metropolitan Commission of Sewers<sup>5</sup> was formed and it insisted on closing all cesspools and connecting all drains to sewers flushed directly into the Thames. Overpopulation, flushing toilets marketed to the masses at the 1851 Universal Exposition, lack of infrastructure, and old drainage pipes all bubbling into the river made things worse. As a result, major cholera epidemics struck in 1831-32, 1848-49 and in 1853-54 among other diseases. The contamination of the river kept on mounting that in 1858 it was dubbed as the ‘Great Stink’ due to the stench or ‘miasma’ from untreated human waste and effluent, and as “*silver Thames*” because “*the whole of the river was an opaque pale brown fluid*” as described by the scientist Michael Faraday in 1855<sup>6</sup>. It was believed that the miasma was responsible for the outbreaks, but in 1849 it was Dr. John Snow who discovered that the epidemics were spread by contaminated water especially from street water pumps in particular the one on Broad Street.

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<sup>5</sup> Chadwick was one of the commissioners. And note that the city of London and some other area in the Metropolis were excluded from this Commission because they already had their own Commission of Sewers.

<sup>6</sup> Michael Faraday completely supported the reformation of the toxic river and after a boat ride in its waters he sent a letter to The Times newspaper in July 1855 entitled *Observation on the Filth of the Thames*.



**Fig. 1** "The 'Silent Highway' Man" cartoon published in Punch magazine, 10 July 1858 no. 35 and refers to the bad smell caused by the heat, high level of sewage and pollution. Death is here associated with pollution and disease.

As a matter of fact, London did not suffer alone from this problem. When Engels was in Manchester in 1840 he described the unspeakable horrors of the working-class life in the Old Town near the south bank of river Irk:

*"[...] In one of these courts there stands directly at the entrance, at the end of the covered passage, a privy without a door so dirty that the inhabitants can pass into and out of the court only by passing through foul pools of stagnant urine and excrement.[...] At the bottom flows, or rather stagnates, the Irk, a narrow, coal-black, foul-smelling stream, full of debris and refuse, which it deposits on the shallower right bank. In dry weather, a long string of the most disgusting, blackish-green, slime pools are left standing on this bank, from the depths of which bubbles of miasmatic gas constantly arise 40 or 50 feet above the surface of the stream.[...] On the lower right bank stands a long row of houses and mills; the second house stand so low that the lowest floor is uninhabitable, and therefore without windows or doors.[...] and, in the rear of this, the Workhouse, the 'Poor-Law Bastille' of Manchester, which, like a citadel, looks threateningly down from behind its high walls and parapets on the hilltop, upon the working-people's quarter below. [...] Everywhere heaps of debris, refuse, and offal; standing pools for gutters, and a stench which alone would make it impossible for a human being in any degree civilised to live in such a district"* (Engels, 1845: 49, 50, 51).

In 1849 the Commission appointed Bazalgette as an assistant surveyor and in 1852 as an engineer. In 1856, the Metropolitan Board of Works (MBW) –the successor of the Commission and later in 1889 replaced by the London County Council– appointed him as chief engineer. In those years Bazalgette wrote many drainage reports<sup>7</sup> and developed a systematic sewers plan completing it by June 1856. Despite its high costs the work on the plan started in 1858. Bazalgette oversaw the construction of over 2100 km of great subterranean tunnels and pipes to intercept the raw sewage flowing freely through the streets. The plan included the construction of pumping stations built at Chelsea, Deptford, Abbey Mills and Crossness (with great architectural designs), and embankments along the Thames creating Victoria, Albert and Chelsea (Halliday 2011, 2013; Dobraszczyk, 2014): *“Bazalgette’s plan, which was modified in some details as construction progressed, proposed a network of main sewers, running parallel to the river, which would intercept both surface water and waste, conducting them to the outfalls at Barking on the northern side of the Thames and Crossness, near Plumstead, on the southern side”* (Halliday, 2013: 77).

The Observer (1861) described it as *“the most expensive and wonderful work of modern times.”* With time the whole plan managed to clean the river, lower mortality rates and eliminate diseases.

Finally the Southern drainage system was operational in 1865 and opened by Prince of Wales and the Western drainage system was completed in 1875.

In that same year, Ward-Richardson<sup>8</sup> delivered an Address in an assembly at Brighton to what a perfect, healthy, and advanced city might be like which he later published in 1876 under the name of *Hygeia. A City of Health*. He spoke of a model city called ‘Hygeia’ which ensures an equal distribution of the population and houses that do not exceed four stories. Three wide main thoroughfares are allowed, from East to West, and beneath them pass underground railways for heavy traffic. Other major and minor streets cross them from North to south at right angles and their wideness allows ventilation, air and sunlight around the houses. Drainage and sewers are a must and conveyed to a destination away from the city. Streets are paved with the same material, sidewalks are planted with trees and all the interspaces of houses are gardens. Monuments and public buildings are all surrounded by gardens. In the text, Ward-Richardson also goes into details of pavement, street designs, workshops, hospitals, households, style of living and personal hygiene. However, he makes a clear perceived relationship between parks and gardens and the idea of the healthy city where *“acreage of our model city allows room for three wide main streets or boulevards [...] They are planted on each side of the pathways with trees, and in many places with shrubs and evergreens. All the interspaces between the backs of houses are gardens. The churches, hospitals, theaters, banks, lecture-rooms, and other public buildings, as well as some*

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<sup>7</sup> Bazalgette’s *Reports on the Drainage of Towns & c* are collected in three volumes: 1858-1865; 1865-1866; 1867-1871.

<sup>8</sup> Ward-Richardson a British doctor and scientist and elected president of the Sanitary Inspector Association (SIA) (1890-1896) and successor to Chadwick.

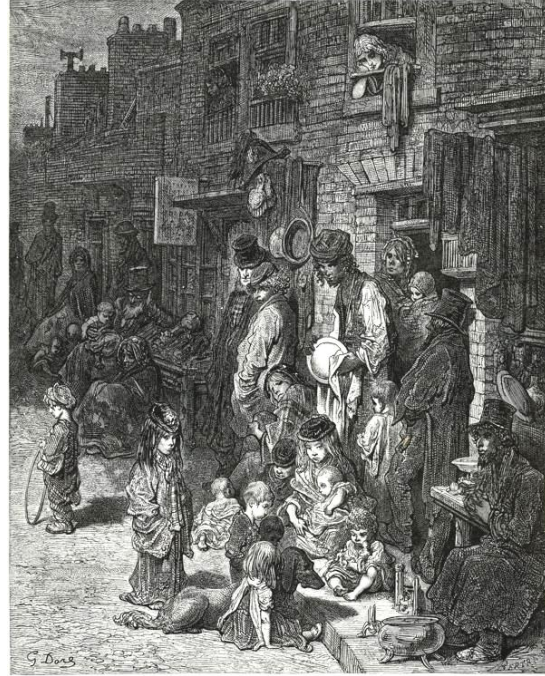
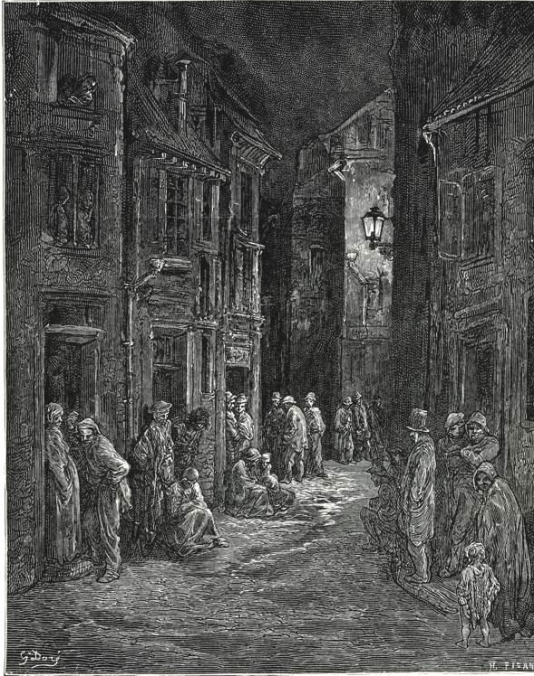
*private buildings such as warehouses and stables, stand alone, forming parts of streets, and occupying the position of several houses. They are surrounded with garden space, and add not only to the beauty but to the healthiness of the city"* (Ward-Richardson, 1875: 20).

His ideas went later on to influence the town planner Ebenezer Howard into developing the 'Garden City', in the 1890s, as a rejection of the industrial city and a technical solution to the slum city areas (Ashton, 1990). In his published book 'Garden Cities of Tomorrow' (1898), Howard explains that they are intended to be planned, self-contained communities surrounded by 'green belts' (parks), containing proportionate areas of residences, industry and agriculture; where the city and the countryside integrate together and forget a new civilization.

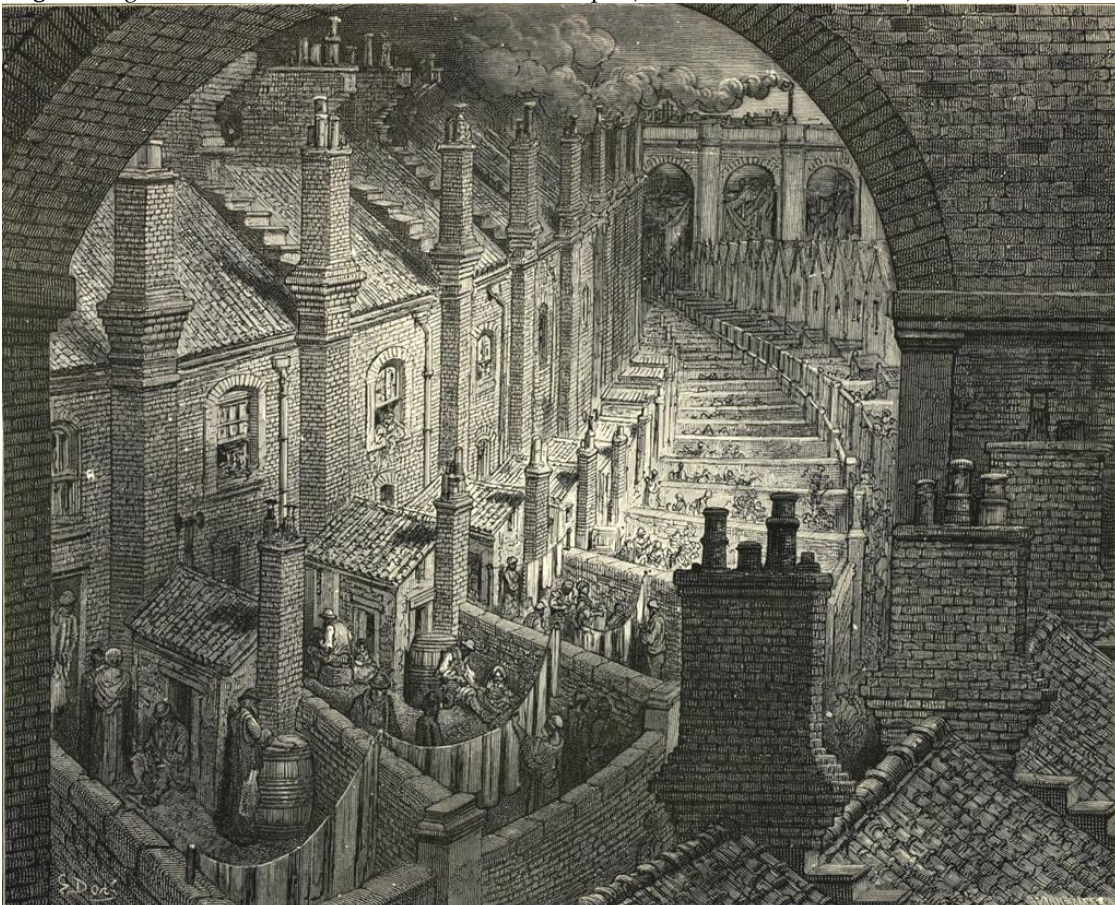
Engels argued that according to the official report on sanitary conditions of the working-class diseases and epidemics are directly attributed to the bad state of dwellings, lack of drainage, ventilation, sunlight and cleanliness, and basic improvements in the city like waste management, sewage and drainage system, allowing ventilation, sunlight and general basic health which is a basic human right are what could make a better future. By the time he published his book's English edition in 1892 many of the issues he described had disappeared or had been improved like for example the drainage matter, and the process of replacing whole unhealthy districts with great avenues had already begun which were mere attempts of the bourgeoisies "to hide the distress of the working-class" to which he commented in the preface:

*"Again, the repeated visitations of cholera, typhus, smallpox, and other epidemics have shown the British bourgeois the urgent necessity of sanitation in his towns and cities, if he wishes to save himself and family from falling victims to such diseases. Accordingly, the most crying abuses described in this book have either disappeared or have been made less conspicuous. Drainage has been introduced or improved, wide avenues have been opened out athwart many of the worst "slums" I had to describe. "Little Ireland" has disappeared, and the "Seven Dials" are next on the list for sweeping away. But what of that? Whole districts which in 1844 I could describe as almost idyllic, have now, with the growth of the towns, fallen into the same state of dilapidation, discomfort, and misery. Only the pigs and the heaps of refuse are no longer tolerated. The bourgeoisie have made further progress in the art of hiding the distress of the working-class. But that, in regard to their dwellings, no substantial improvement has taken place, is amply proved by the Report of the Royal Commission "on the Housing of the Poor," 1885. And this is the case, too, in other respects. Police regulations have been plentiful as blackberries; but they can only hedge in the distress of the workers, they cannot remove it" (Engels, 1845 (1892): IX).*





**Fig. 2** Bluegate Fields and Wentworth street, Whitechapel (Blanchard, Gustave, 1872)

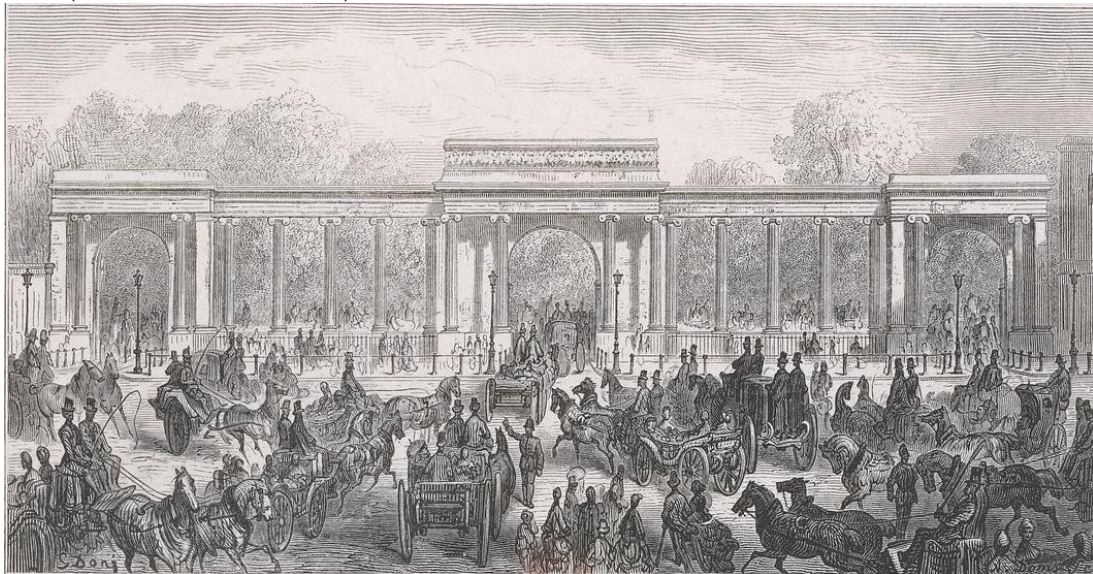


**Fig. 3** Over London – By Rail (Blanchard, Gustave, 1872) How the poor people lived in London compared to the rich below





**Fig. 4** Zoological gardens – Sunday promenade (Blanchard, Gustave, 1872), Hyde Park corner – Piccadilly entrance (Blanchard, Gustave, 1872)



**Fig. 5** The Stalls, Covent Garden Opera (Blanchard, Gustave, 1872)

In spite of hygiene problems, Great Britain and particularly London did not lack in a network of parks and gardens mainly of large scale. However they were mostly found in the wealthy neighborhoods of the West End and up until the 19<sup>th</sup> century they were still private spaces, except for a few, like Hyde Park and St. James Park, opened to the public mainly to the high class and aristocrats. Many aristocrats and Lords of the Manor converted their properties into parks and squares, following the Covent Garden model, and allowed the construction of new wealthy buildings adding by that more prestigious value to their property and palace. The squares' gardens were normally fenced with railings or gates accessible only for visitors living in their perimeter. Borrowing the Italian concept of plaza, residential squares were used by English planners to create open space in new residential neighbourhoods of expanding cities. These open squares were transformed into garden squares and were often enclosed with fencing, becoming semi-

private gardens rather than public spaces (Chadwick, 1966; Longstaffe-Gowan, 2012). English gardeners strived to create an aesthetic unity that reflected natural processes (Chadwick, 1966).



**Fig. 6** Hyde Park (Clark, Dubony, 1814. LMA)



**Fig. 7** Regent's Park (Baynes, c1830. LMA)



**Fig. 8** St. James Park (Boys, 1842. LMA)



**Fig. 9** Trafalgar Square (Unknown, 1863. LMA)

Examples of rural landscape values introduced into the city

In the late 18<sup>th</sup> century and early 19<sup>th</sup> century, they started to be landscaped by famous landscape designers such as Humphry Repton in Russell Square and Southampton or Bloomsbury Square. In London, the Crown's policy of economic valuation of their property, including its urbanization, led to the conversion of the Royal Marylebone Park into architect John Nash<sup>9</sup>'s Regent's Park in 1811. Nash was responsible for much of Regency London's layout, and influenced by Repton he created picturesque English landscapes especially after his work on Regent's Park, Street and Canal that were opened to the public in 1841, i.e. the upper class of the West End (Capel, 2002). Capel stated that in Great Britain, it is considered that the first public park was in 1840 and the first municipal park in 1843 all through private donations.

<sup>9</sup> John Nash, British architect under the patronage of the Prince Regent and responsible for many projects in and outside London such as Regent's Park and Street, St James's Park, Park Crescent, Trafalgar Square, a part of Buckingham Palace, Park Square, Chester Terrace, among others.



*“[...] algunos consideran que en Gran Bretaña el primer parque público es de 1840, y fue una donación de Joseph Strutt a la ciudad de Derby. Poco después, en 1843, se construyó el primer parque de iniciativa municipal en Gran Bretaña, el de Birkenhead, el cual se financio parcialmente vendiendo una parte del terreno para la construcción de vivienda, lo que puede indicar, en realidad, una estrategia de valorización de terrenos. La iniciativa privada participaría también luego en la construcción de parques municipales, contribuyendo activamente a las suscripciones publicas que se promovieron para ello” (Capel, 2002: 300). “El «paraíso cerrado para muchos y jardín abierto para pocos» de Pedro Soto de Rojas se irá convirtiendo en el jardín para todos, en el parque municipal” (Capel, 2002: 296).*

In London in 1856, following the transformations of Paris, several municipal parks and open spaces were opened. The Metropolitan Board of Works, under its chairman Sir John Thwaites, obtained an amending Act of 1856 of Parliament giving them the power to provide “parks, pleasure-ground and open spaces” (Sexby, 1905: xvi). As for the open spaces and commons –controlled by the Lords of the Manors and affected by the railways– the efforts of the Board and private individuals caused the Parliament to appoint in 1865 a Select Committee “to inquire into the best means of preserving for the public use the forests, commons and open spaces in and a around London” and one year later the Metropolitan Commons Act “prescribed a mode of procedure under which the commons in the neighborhood of London could be permanently secured for the public” (Sexby, 1905: xix).

From then on, the Board and later the County Council started to purchase and lay out the likes of Finsbury Park (purchased in 1857 and opened 1869), Southwark Park (purchased in 1864 and opened in 1869), Leicester Square (1874), Ravenscourt Park (1888) and Clissold Park (1889) among others<sup>10</sup>.

And soon after that a competition of parks and gardens began among European cities and as such many private and public urban parks and gardens were created in Germany, France, Spain, and many other cities.

### **The ‘Eventrement’ of Paris**

In France, particularly Paris, hygiene problems were similarly drastic in terms of insalubrity, overpopulation, and poverty. Victor Considérant on of the influential Saint-Simoniens wrote in *Destinée Sociale Vol.I* that “Paris is an immense workshop of rot”:

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<sup>10</sup> J. J. Sexby in his book *The Municipal Parks, Gardens and Open Spaces of London: Their History and Associations* (1905) lists 28 municipal parks and open spaces and explains in his introduction that places like Hyde Park, Regent’s Park or St. James’s Park are “national rather than municipal ‘lungs’, because they are kept up at the expense of the nation at large, and not by any one municipality. London’s municipal parks and open spaces are those which are maintained by the London County Council at the expense of the Metropolitan ratepayers (1905: xv)

*“Paris c’est un immense atelier de putréfaction, où la misère, la peste et les maladies travaillent de concert, où ne pénètrent guère l’air ni le soleil. Paris, c’est un mauvais lieu où les plantes s’étioilent et périssent, où, sur sept petits enfants, il en meurt quatre dans l’année”* (Considérant, 1837: 462).

And Frégier while describing the neighborhoods of La Cité, des Arcis and Saint-Honoré saw that:

*“Ces rues étroites, sales, flanquées de maisons hautes de quatre étages et dont les allées sont presque toutes dépourvues de portiers, ont été abandonnées à la population la plus infime et la plus corrompue de la capitale. Le quartier de la Cité, notamment, a un aspect sinistre et qui contraste singulièrement avec les quais et les monuments qui l’entourent et qui l’avoisinent. Il est sillonné de rues larges au plus de 8 pieds et bordées de maisons noircies par le temps. Ces maisons très élevées, comme nous l’avons dit, rendent les rues tristes et humides, et elles sont elles-mêmes fort peu éclairées, surtout dans le rez-de-chaussée”* (Frégier, 1840: 135, 136)

For this reason, many cities took measures of hygiene through urban changes and developments such as the case of Paris the century’s most significant and consequential urban regeneration. The city and its metropolitan area were radically transformed between 1853 and 1869 under the direction of Baron George-Eugène Haussmann<sup>11</sup> the Prefect of the Seine Department (1853-1870). In fact, Haussmann was continuing a project already started with Claude-Philibert Barthelot, Comte de Rambuteau, prefect of the Seine between 1833 and 1848.<sup>12</sup> Rambuteau established the basis of Paris’s fundamental transformation that Haussmann carried out during the Second Empire. The operations’ main purpose was to clean, connect, modernize, ‘embellish’ and turn Paris into *“la plus belle ville du monde”* (Persigny, 1896: 259) or as Rambuteau called it *“la métamorphose de Paris”* (Lequin, 1905: 368). He was concerned with hygiene and his motto was *“water, air, shade”*<sup>13</sup>. In 1839 he started his first ‘percée’ in Paris by opening-up a 13m wide road later named after him and supported the prolongation and completion of Rue de Rivoli –a project proposed by Napoleon Bonaparte and carried out during his reign– until l’Hôtel de Ville and Saint-Antoine Street (Persigny, 1896; Lequin, 1905).

In his memoirs, Duc de Persigny stated that the Paris’s improvement no longer consisted of reconstructing housings and aligning facades but of opening straight streets and axes crossing through unhealthy quarters and neighborhoods, a procedure that began with Rambuteau under the reign of Louis-Philippe:

*“L’idée d’améliorer la viabilité de Paris, non plus par la voie lente du reculement des façades, à mesure de la reconstruction des maisons, mais en ouvrant directement un*

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<sup>11</sup> Baron George-Eugène Haussmann was the former Prefect of the Gironde the capital of Bordeaux. He was selected by Napoleon III to become the Prefect of the Seine Department between 1853 and 1870 to continue and carry out the urban transformation of Paris.

<sup>12</sup> Claude-Philibert Barthelot, Comte de Rambuteau was the Prefect of the Seine Department from 1833 to 1848. Under his administration important monuments were built, the construction of the Arc de Triomphe was finished and the opening-up of the Champs-Élysées was started.

<sup>13</sup> In Lequin 1905: Urban health and hygiene became a big issue after the devastating cholera epidemic of 1832.

*passage au travers des massifs, parle procédé de l'expropriation publique, cette idée féconde, qui devait si heureusement transformer Paris et nos grandes cités, appartient au règne de Louis-Philippe. M. de Rambuteau, préfet de la Seine, l'avait inaugurée par le percement de la rue qui porte son nom. La population de Paris avait été vivement impressionnée, à la vue de cette voie nouvelle traversant un quartier misérable, malsain, pour y porter l'activité, l'air, la lumière et la santé; et la popularité qui accueillit cette œuvre était de nature à encourager l'imitation. C'est en effet ce qui arriva : à peine le prince Louis-Napoléon parvenait-il à la présidence de la République qu'on lui soumettait le plan d'un percement bien autrement considérable, celui du prolongement de la rue de Rivoli, depuis le Louvre jusqu'à l'Hôtel de ville, au travers de quartiers épouvantables. M. Berger, le nouveau préfet de la Seine, jaloux des lauriers de M. de Rambuteau, avait mis un grand zèle à faire étudier le projet et à en déterminer l'adoption par le gouvernement. Ce grand travail, commencé vers le milieu de l'année 1851, était déjà en pleine exécution à l'époque du coup d'État" (Persigny, 1896: 237, 238).*



**Fig. 10** Perspective views of Rue de Rivoli, one of the first 'percement', showing its straight and rectilinear crossing through the city (Plaut, 1865) (Paris et ses environs, 1890)

Taking advantage of the perks of Industrial Revolution's technical advances he modernized Paris's sewers, developed and generalized the gas lighting jets and placed public urinals along the roads. He embellished the city by placing benches and planting trees in its avenues and public spaces, and installing monumental fountains<sup>14</sup>, and constructing sidewalks.

*"Je fis construire tous les ans sept à huit mille mètres d'égouts cimentés qui assainirent doublement le sol, en permettant de remplacer par des chaussées bombées les antiques chaussées en cuvette, fendues d'un ruisseau au milieu. J'essayai tous les genres de pavage,*

<sup>14</sup> The majority were designed by Visconti like the ones in Place Richelieu, Place de la Concorde and the Champs-Élysées and others were placed in Jardin des Plantes, Place de Saint-Sulpice, next to Molière's house, and behind Notre-Dame in the garden that he had planted (Lequin, 1905).

*et je pourrais en parler doctement, depuis le bon pavé smillé jusqu'au macadam boueux, poussiéreux, dispendieux, mais qui offre l'avantage de rouler sans bruit et que je réservai aux abords des hôpitaux, des tribunaux et des théâtres. En 1833, il existait à peine 16.000 mètres de trottoirs ; en 1848, il y en avait 195.000, rien que pour les rues, car si je compte les places quais, boulevards entièrement aménagés d'égouts, ruisseaux latéraux, trottoirs, tuyaux de descente, 1.400 voies ont été métamorphosées sur une longueur de 260 kilomètres. Encore, malgré tous mes efforts, n'ai-je pu obtenir une mesure législative qui rendît la construction des trottoirs obligatoire aux propriétaires" (Lequin, 1905: 376).*

Rambuteau was succeeded by Berger<sup>15</sup> but the latter was dismissed by Napoleon III himself and assigned Haussmann whom Duque Persigny interviewed himself and selected from several other candidates:

*"Je fis venir successivement plusieurs des principaux préfets : MM. Le Roy, préfet à Rouen, Besson, à Lille, de Crèvecœur, à Marseille, Tourangin, anciennement à Lyon, Haussmann, à Bordeaux, etc. Outre ce que je savais d'eux et par moi-même et par les traditions de l'administration, je m'attachai à les étudier avec soin pendant leur séjour à Paris, et en dînant presque en tête à tête avec eux [...] Comme me l'avait prédit M. Frémy, alors secrétaire général de mon ministère, c'est M. Haussmann qui me frappa le plus [...] J'avais devant moi un des types les plus extraordinaires de notre temps. Grand, fort, vigoureux, énergique, en même temps que fin, rusé, d'un esprit fertile en ressources, cet homme audacieux ne craignait pas de se montrer ouvertement ce qu'il était [...] Pour lutter, me disais-je, contre les idées, les préjugés de toute une école économique, contre des gens rusés, sceptiques, sortis la plupart des coulisses de la Bourse ou de la Basoche, peu scrupuleux sur les moyens, voici l'homme tout trouvé" (Persigny, 1896: 251-254).*

Haussmann's extensive work in Paris started with the 'percement' or 'piercing' of large rectilinear streets and boulevards with the same objectives of "*aérer, unifier, et embellir*" (de Moncan, Heurteux, 2002: 33, 34) Paris especially the dense neighborhoods in the center and along the railroad (Faubourg Saint-Antoine, Marais). Haussmann wrote that the Emperor was haunted by two "generous ideas"; first, the completion of Paris's Transformation not only to create a great Capital and a "Cité Reine du Monde" (Haussmann, 1890) but foremost to provide for its citizens the essential elements of public health: air, light and water, to facilitate communication, create monumental perspectives and open up avenues planted with large-scale promenades, parks and public gardens; and second, to gradually attenuate taxes especially the 'Impôts et Taxes de Consommation' (income and consumption taxes) that weighed heavily on the working class and laborers. Another indirect objective –an issue that was a debate among

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<sup>15</sup> Berger was the prefect of the seine department successor of Rambuteau. He was dismissed from his position by the Emperor himself due to his slow progress and protests concerning financial and budget matters. He was known for his feud with the Minister of Interior, Duque de Persigny, where he ran a campaign of rumors and scandals attempting to turn his friends and the Emperor against him, and tried to obstruct the works on Rivoli Street and Boulevard de Strasbourg (Persigny, 1868).

Haussmann's critics— was for the military security of the state and troops movement in order to avoid and help suppress popular uprisings and barricades (Maderuelo, 2010; Harvey, 2003, 2008; Mumford, 1961, 1970; Scott, 1998).

*"The redesigned city was, above all, to be made safe against popular insurrections. As Haussmann wrote, "The order of this Queen-city is one of the main pre-conditions of general [public] security"<sup>16</sup> [...] Louis Napoleon and Haussmann had seen the revolutions of 1830 and 1848; more recently, the June Days and resistance to Louis Napoleon's coup represented the largest insurrection of the century. [...] A series of new avenues between the inner boulevards and the customs wall was designed to facilitate movement between the barracks on the outskirts of the city and the subversive districts. As Haussmann saw it, his new roads would ensure multiple, direct rail and road links between each district of the city and the military units responsible for order there. [...] The reconstruction of Paris was also a necessary public-health measure. And here the steps that the hygienists said would make Paris more healthful would at the same time make it more efficient economically and more secure militarily" (Scott, 1998: 61, 62).*

Mumford, when writing about Paris's medieval narrow streets and culs-de-sac, stated that *"it was the best possible protection against assault from within"* (Mumford, 1968: 70) and 'razing' the neighborhoods with wide avenues aesthetically enhanced military power.

*"In view of the importance of the army to the ruling classes, it is no wonder that military traffic was the determining factor in the new city plan, from the first mutation in Alberti to the final survival in the laying down of Haussmann's boulevards in Paris. The esthetic effect of the regular ranks and the straight line of soldiers is increased by the regularity of the avenue: the unswerving line of march greatly contributes to the display of power, and a regiment moving thus gives the impression that it would break through a solid wall without losing a beat" (Mumford 1970: 96).*

In his memoir Haussmann did not directly deny this fact and wrote that

*"C'était l'éventrement du Vieux Paris, du quartier des émeutes, des barricades, par une large voie centrale, perçant, de part en part, ce dédale presque impraticable, accostée de communications transversales, dont la continuation devait compléter l'œuvre ainsi commencée. [...] Assurément, l'Empereur, en traçant le Boulevard de Strasbourg et son prolongement jusqu'à la Seine et au delà, n'avait pas plus en vue l'utilité stratégique de ce prolongement, que de tant d'autres grandes voies, comme la Rue de Rivoli, par exemple, dont l'alignement droit ne se prêtait pas à la tactique habituelle des insurrections locales. Mais, s'il n'a pas cherché, par-dessus tout, ce résultat, comme l'Opposition de lui reprochait, on ne peut nier que ce fut la très heureuse conséquence de tous les grands percements conçus par Sa Majesté pour améliorer et pour assainir l'ancienne ville. Ce résultat servit, concurremment avec nombre d'autres bonnes raisons, à justifier, vis-à-vis de la France, que la tranquillité de Paris intéresse au premier chef, la participation de l'Etat*

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<sup>16</sup> James C. Scott is quoting John Merriman's *Baron Haussmann's Two Cities* and later published in Merriman's *Aux marges de la ville: Faubourgs et banlieues en France, 1815-1871* (1994).

*dans les frais de ces onéreuses entreprises. Quant a moi, qui suis le promoteur des additions faites au projet initial, je déclare n'avoir pas songé le moins du monde, en les combinant, a leur plus ou moins d'importance stratégique"* (Haussmann, 1893: 54, 55)

Paris's plan consisted of three phases each corresponding to a network, 'réseau', of precise routes. Following the Emperor's direction and approval, Haussmann started with the first phase known as the 'Grande Croisée' of Paris (1852-1859), the pivot of Paris's urban transformation, continuing a project commenced in 1801 under Napoleon I and projected by architects Charles Percier and Pierre-Francois-Leonard Fontaine.<sup>17</sup> It consisted of the prolongation of Rue de Rivoli<sup>18</sup> and Rue Saint-Antoine (East-West axis) (1853-1855) intersecting with Boulevards of Strasbourg and Sébastopol (North-South axis) (1855-1859) creating in the process several squares like Place du Carrousel and Place de Saint-Germain-l'Auxerrois among others. The plan consisted of two other phases – 'deuxième réseau' (1859-1867) and 'troisième réseau' (1869-1925) – where many other new networks of streets and boulevards were created, widened or prolonged on both sides of the Seine. Between 1852 and 1870, around more than 200 km of roads were carried out totally rearranging the circulation and displacement within the city. Moreover, a complex drainage and sewage system was created underneath the streets and boulevards;<sup>19</sup> gas street lamps, trees, street furniture, and fountains with potable water were placed in the city's public spaces; new monuments were restored and built; as well as parks and squares (de Moncan, Heurteux, 2002). As a matter of fact, Paris was one of the advanced cities in incorporating urban services that passed through several stages of extension. The first was in 1805 where a thorough inventory of the existing network was developed. In the second stage, a sanitation project was executed in the capital's northeastern neighborhoods. And in later stages the network evolved in length passing from 37 kilometers in 1824 to 80 kilometers in 1850. Actual work on the sewage network started in 1865 under the direction of Belgrand and by 1871 it reached 560 kilometers (Dupuy, Knaebel, 1982; Magrinyà, 1995).

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<sup>17</sup> This demonstrates further that before Haussmann's plan, Paris was not in a "period of inaction" as Harvey (2003) puts it, regardless of how much he struggled and "needed to build a myth of a radical break around himself and the emperor –a myth that has survived to the present day– " (2003:10). He continues that "Considérant, Perreymond, Meynadier, and even Lanquentin, produced practical plans rather than utopian ideals, even though their thinking was animated by Saint-Simonian and Fourierist ideas. It is against the ferment of this kind of thinking that we have to read what Haussmann actually did. He did not begin from scratch, and owed an immense debt to these pioneering ways of thought (he surely read Daly's *Revue*). The problem for him was that these ideas arose out of political presuppositions and utopian dreams that were in many respects anathema to Bonapartism. Hence the myth that Haussmann propagated of a radical break. That much of what he did was already present in embryo in the 1830s and 1840s does not, however, detract from the fact that modernity, as argued in the introduction, entered a new and distinctive phase after 1848 and that Haussmann contributed immensely to how this new form of modernity was articulated" (2003: 82, 83). After all, this matter worked in his defense during his downfall.

<sup>18</sup> It was important for the Emperor to complete the street before Paris's Universal Exposition of 1855 and build the Grand Hotel du Louvre –as part of the project– which Hittorff participated in its design.

<sup>19</sup> Haussmann built large subterranean galleries and tunnels under the streets, creating a city underneath a city, comparing them to an organ that functions just like a human body (Haussmann, 1890b, 1893).

Hausmann assembled a distinguished municipal body, and technical offices consisting of a great team of administrators, technicians and professionals, the likes of architect Eugène Deschamps the manager or 'conservateur' of Paris's plan; engineer Jean-Charles Adolph Alphand head of the new Service of Promenades and Plantations responsible for designing Bois de Boulogne, Bois de Vincennes, Parc des Buttes Chaumont, Parc Montsouris; Jean-Pierre Barillet-Deschamps chief gardener in charge of landscaping the great parks and gardens; Eugene Belgrand the engineer of water, drainage, and sewers management responsible for building over 300km of aqueducts between 1864 and 1893; architect Gabriel Davioud known for designing street furniture, grillwork, fountains like Fontaine Saint-Michel, and several monuments like Théâtre du Châtelet and Théâtre de la Ville; architect Jacques Ignace Hittorff responsible for redesigning the Place de la Concorde and the Champs-Élysées<sup>20</sup> and other monumental projects; Victor Baltard known for reconstructing Les Halles.

Following the Emperor's instructions, the parks were designed inspired by his memories of London's parks (Hausmann, 1893), especially Hyde Park, but on a much larger scale such as Bois de Boulogne and Bois de Vincennes<sup>21</sup>.

Capel stated that during the Napoleon and Restoration Period the classical formal garden was momentarily brought back before the English park style took over France again. And throughout the 19th century these parks and gardens were designed in a more diverse eclectic style that not only affected urban spaces but also architecture.

*"Desde los años 1840 –tras la época napoleónica y la nueva expansión del jardín clásico francés durante la Restauración– se consolida y difunde de nuevo en Francia la moda del parque inglés, que desde ese país se extenderá a toda Europa. [...] De todas maneras, a lo largo del XIX el hecho más destacado es el carácter ecléctico del diseño de estos espacios. Un eclecticismo difundido sobre todo por revistas y tratados y que supone una aceptación de diversos estilos tanto en arquitectura como en jardinería" (Capel, 2002: 300-309).*

## Promenades and Squares

The opening up of avenues and boulevards resulted in a network of new squares in their proximity or between buildings. It was important for Hausmann and the Emperor to create squares in all of Paris's arrondissements, just like in London, designated to be used by rich and poor alike. They are spaces that had positive effect on public health and hygiene by providing light and air, such as, Square Saint-Jacques, Square Bergson, Square du Temple, Square Louvois, Square des Innocents, Square de Montholon, Square Jean XXIII, Squares des Invalides, and Square Emile-Chautemps formerly known as Square des Arts-et-Métiers, among others.

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<sup>20</sup> The lanterns or streetlights installed in the perimeter of Plaça Catalunya are a reproduction of Hittorff's designed for the Champs-Élysées around 1838 given as a gift to Barcelona from the City of Paris.

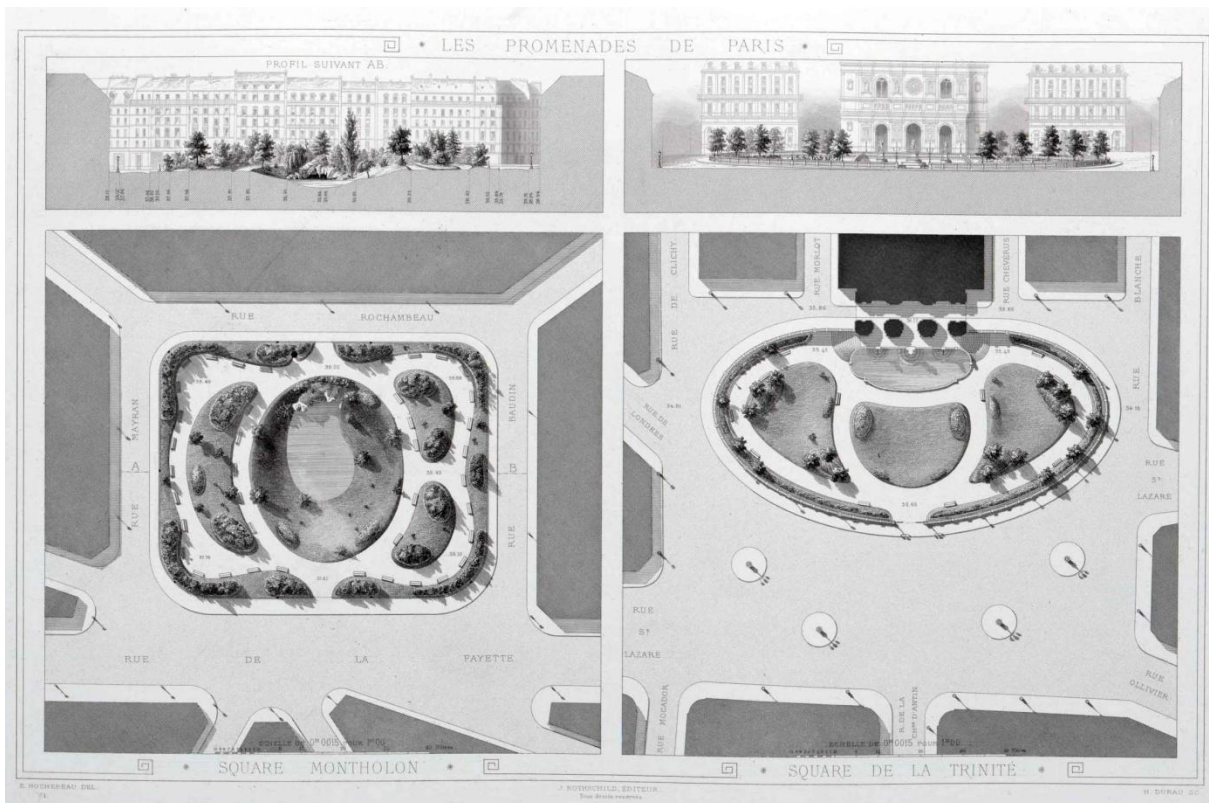
<sup>21</sup> But they were designed with regular lines unlike Hyde Park's irregular or serpentine pathways (Alphand, 1967-1873).



*“Aussi, [l’empereur] me prescrivit-i de ne manquer aucune occasion de ménager, dans tous les arrondissements de Paris, l’emplacement du plus grand nombre possible de squares, afin de pouvoir offrir avec largesse chez nous, comme on le faisait à Londres, des lieux de délassement et récréation a toutes les familles, à tous les enfants, riches ou pauvres. [...] Suivant les indications de l’Empereur, mon administration a doté Paris de squares libéralement répartis entre tous ses arrondissements anciens et nouveaux. Il en fut créé 24, de 1853 à 1869 ; savoir : 17, dans la Vieille Ville ; 7, dans la Zone Suburbaine annexée” (Haussmann, 1893 : 240).*

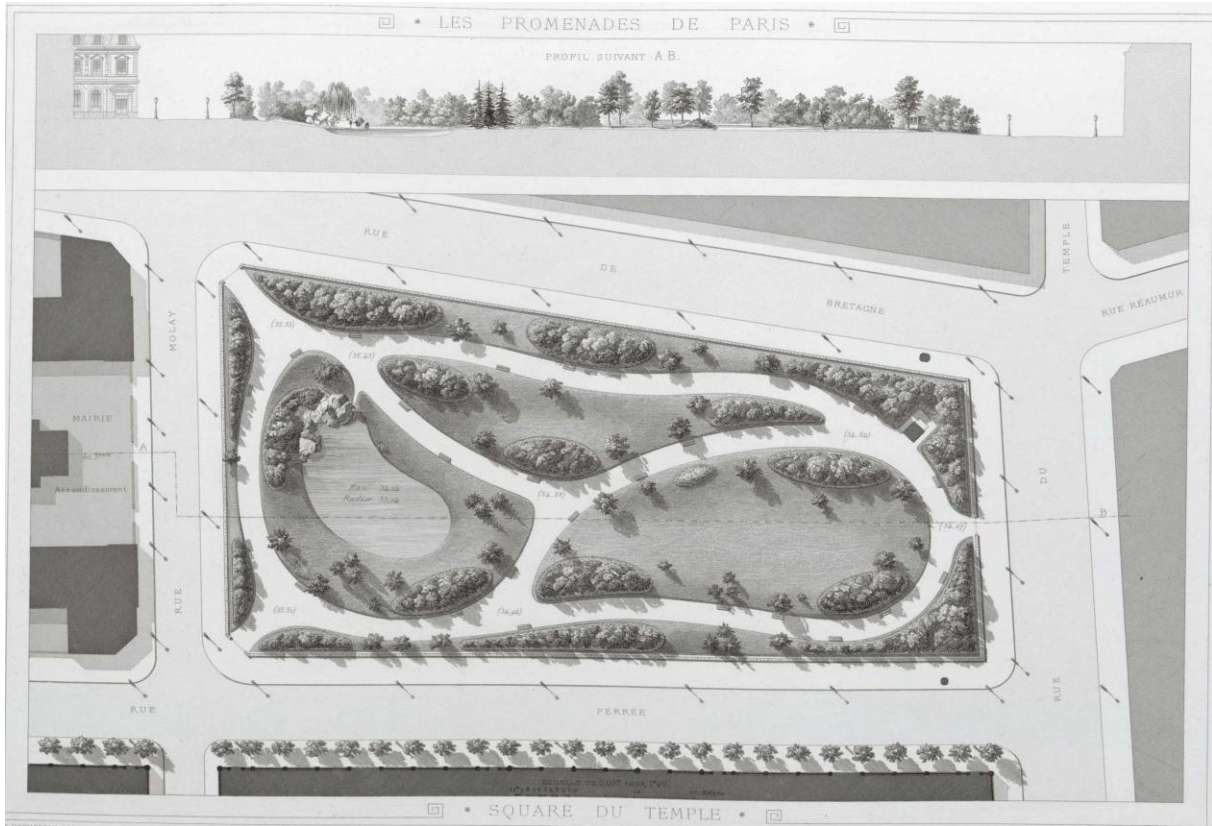
Concerning the term ‘squares’ Haussmann added that :

*“Le nom de square signifie, en anglais : carré. Nous désignons ainsi, a l’instar de nos voisins d’outre-mer, les jardins presque toujours clos de grilles, entourant ou côtoyant certains de nos édifices, occupant le milieu de la plupart de nos Places, ou bien utilisant des espace laisses libres par le trace de nos vois publiques nouvelles et par le plan de lotissement des parcelles de terrain demeurées en dehors des alignements de ces voies et livrées a la reconstruction. La forme de ces enclos verdoyants et fleuris dans la belle saison, pleins d’air et de lumière, en tout temps, ne justifie point cette qualification, je le confesse, en bien des cas” (Haussmann, 1893 : 239).*



**Fig. 11** Elevation and plan of Squares Montholon and De La Trinité(Alphand, 1867-1873)





**Fig. 12** Elevation, plan, and perspective of Square du Temple (Alphand, 1867-1873. De Moncan, Heurteux, 2002)

When Alphand, published the two volumes book *Les Promenades de Paris* (1867-1873), within the framework of Haussmann's plan, he showed the implementation and designs of the city's parks, squares, gardens, and landscape planning. The technical offices disseminated and conveyed their projects taking them a step further by organizing, normalizing and arranging streets, parks, promenades, gardens and squares. They showed great details and thorough designs and drawings emphasizing on elements of street furniture, vegetation, pavement, and infrastructure. This standardization and systematization had such importance and influence that it became an urban model throughout Europe<sup>22</sup> (Remesar, 2005; 2007).

*"O impacto da obra de Alphand, "Les Promenades de Paris", foi enorme em toda Europa, mas não podemos entendê-lo sem ter em conta que por trás desta normalização, falamos de todo um sector industrial metalúrgico, particularmente em Inglaterra e França, que vai ter no novo modelo urbano a oportunidade do seu desenvolvimento e expansão nos mercados internacionais, sobretudo devido ao fenómeno das Exposições Universais"* (Remesar, 2005: 33).

The influence even continued until our present days, the fact that led Remesar to develop the 'Alphand- Davioud- Hittorff paradigm of urban furniture in historic centers', where replicas of their style still predominates in shaping the landscape, spaces, and elements of our historic center.

*"Se as grandes operações de Haussmann, na Paris do segundo império, tiveram como um dos seus resultados, a criação de uma nova indústria, a da "fonte d'art", a existência desta indústria associada à publicidade está a produzir "réplicas" de centros históricos à escala planetária. Por outro lado, os jardins dos nossos centros pretendem manter viva a imagem do "jardim-square" romântico que caracterizou o urbanismo higienista do século XIX"* (Remesar, 2007: VIII).

Even though they cannot compete with the contemporary designs nor are they compatible with sustainability requisites, like in the case of street lights, this 'Alphand- Davioud- Hittorff style' of urban furniture is being modified and placed all over the historic centers –especially in parks and squares that characterized the 19<sup>th</sup> century urban hygiene– to create a specific authentic mood and atmosphere.

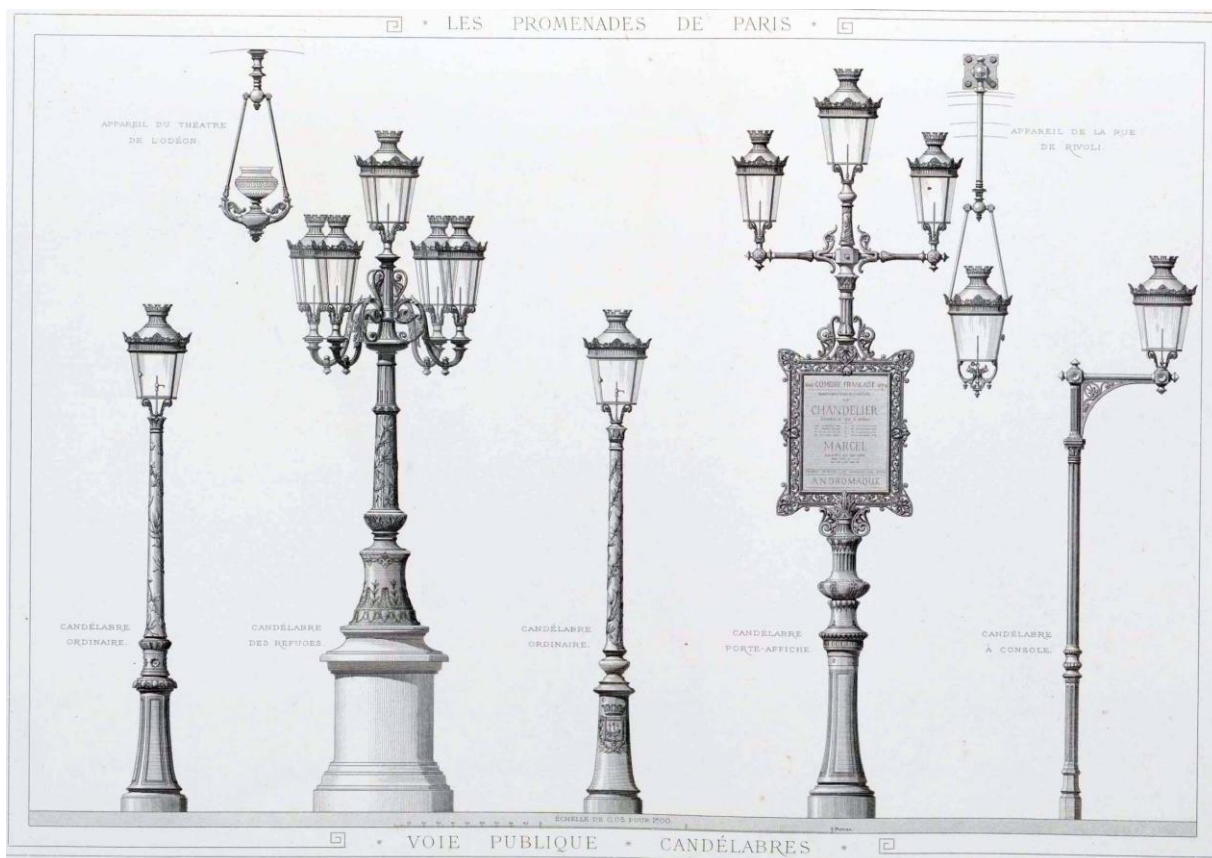
*"As empresas produtoras de mobiliário urbano reproduzem até ao enjoo o que podemos chamar de 'estilo Alphand-Hittorff', um estilo de antiquário cuja única missão é recriar um*

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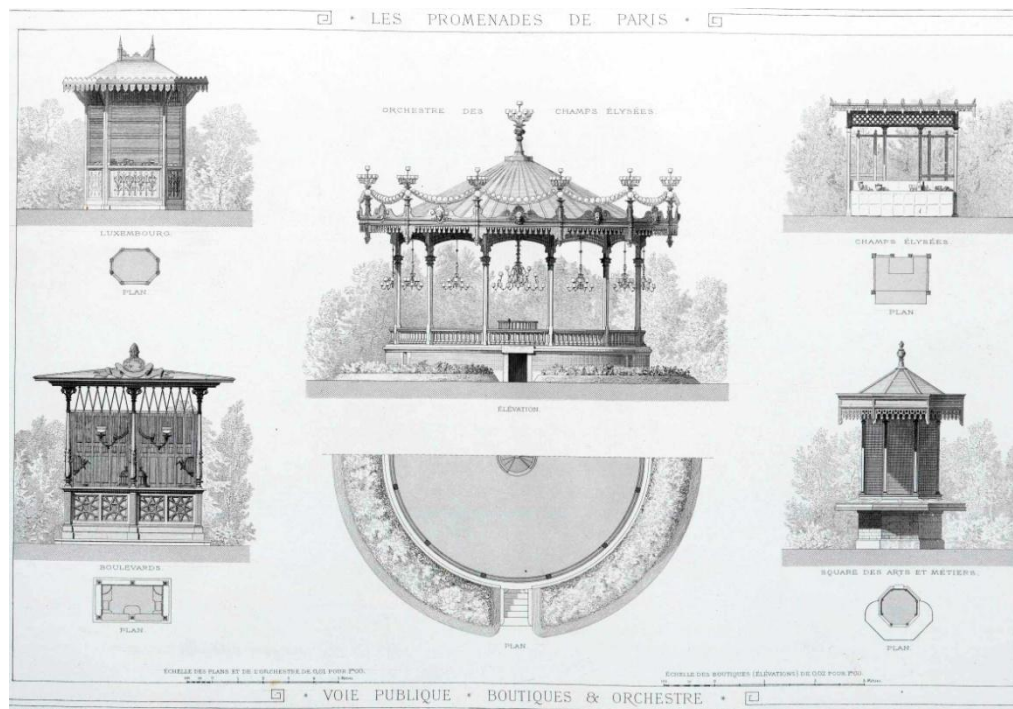
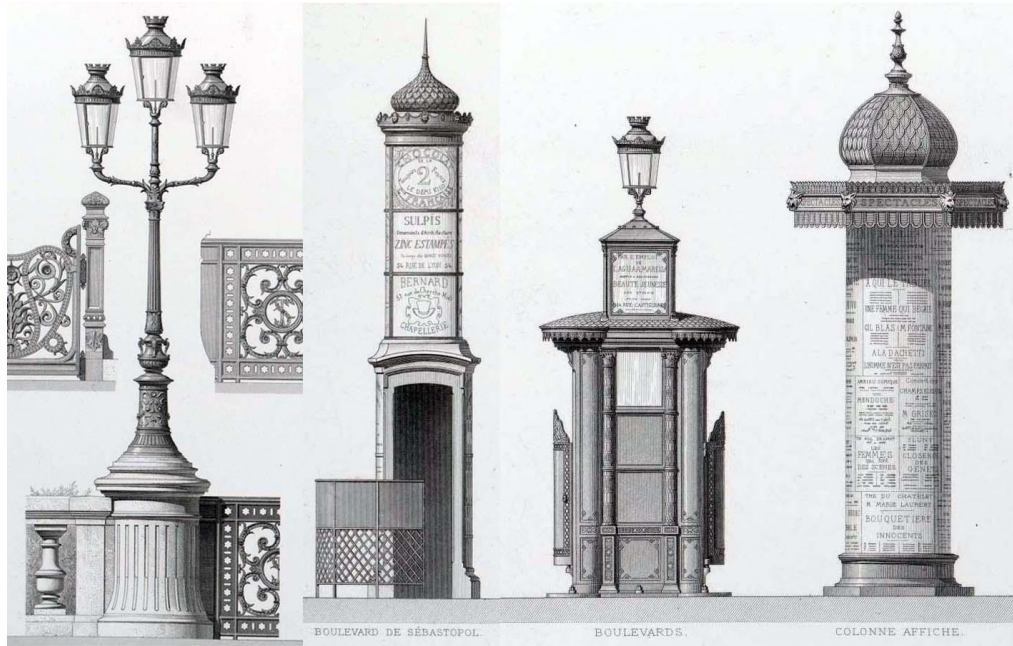
<sup>22</sup> Many of Barcelona's street furniture were derived from this Paris model especially in the light of the 1888 and 1929 Universal Expositions. In Plaça Catalunya, for example, the street lamps found in its perimeter were a gift from the Cité de Paris and a replica of Hittorff's 1838 lamps for the Champs Elysées. Moreover, the street pavements influenced Ildefons Cerdà's designs for the Eixample streets. For more information on the pavements check the Phd thesis of Danae Esparza Lozano *El diseño del suelo: el papel del pavimento en la creación de la imagen de la ciudad* (2014).

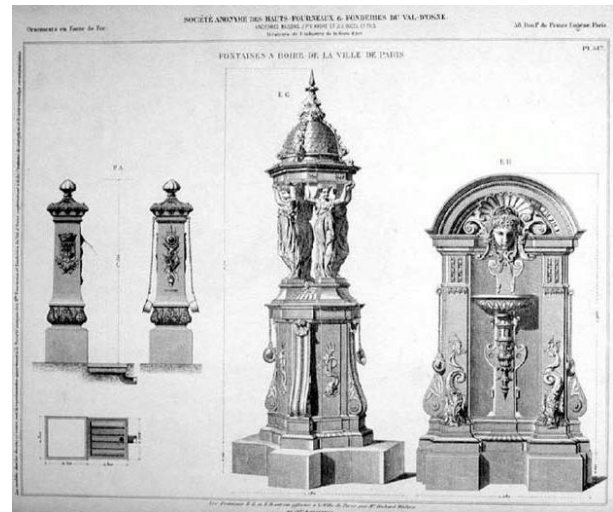
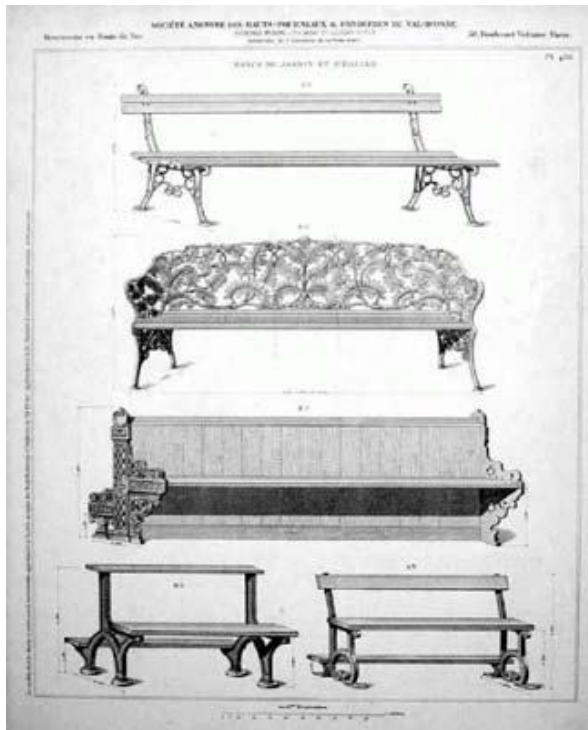
For a detailed study of the impact of Parisian postulates on other cities, see Remesar, de Lecea, and Grandas, 2010; Aguas, 2009; Barradas, 2015; Esparza, 2014; Hernández Sánchez, 2009; Valente Pereira, 2013; Alves, 2010

*ambiente que nunca existiu. A maior parte das luminárias que são instaladas nos centros históricos são inimigas do meio ambiente pela sua baixa eficiência energética. Contudo, mantêm-se, alteram-se e colocam-se em todo o centro urbano que se preze, inclusivamente voltando a utilizar o gás como energia. Criam ambiente, funcionam cenograficamente ainda que, quando os seus antepassados foram colocados pela primeira vez, implicassem uma inovação técnica e estética de grande magnitude. [...] É óbvio que as réplicas actuais dos elementos de mobiliário do século XIX não podem competir com os desenhos contemporâneos, nem em funcionalidade, nem em ecologia, nem em ergonomia. No entanto, o ‘estilo Alphand-Hittorf’ predomina na configuração da paisagem urbana dos nossos centros históricos” (Remesar, 2007: VIII).*

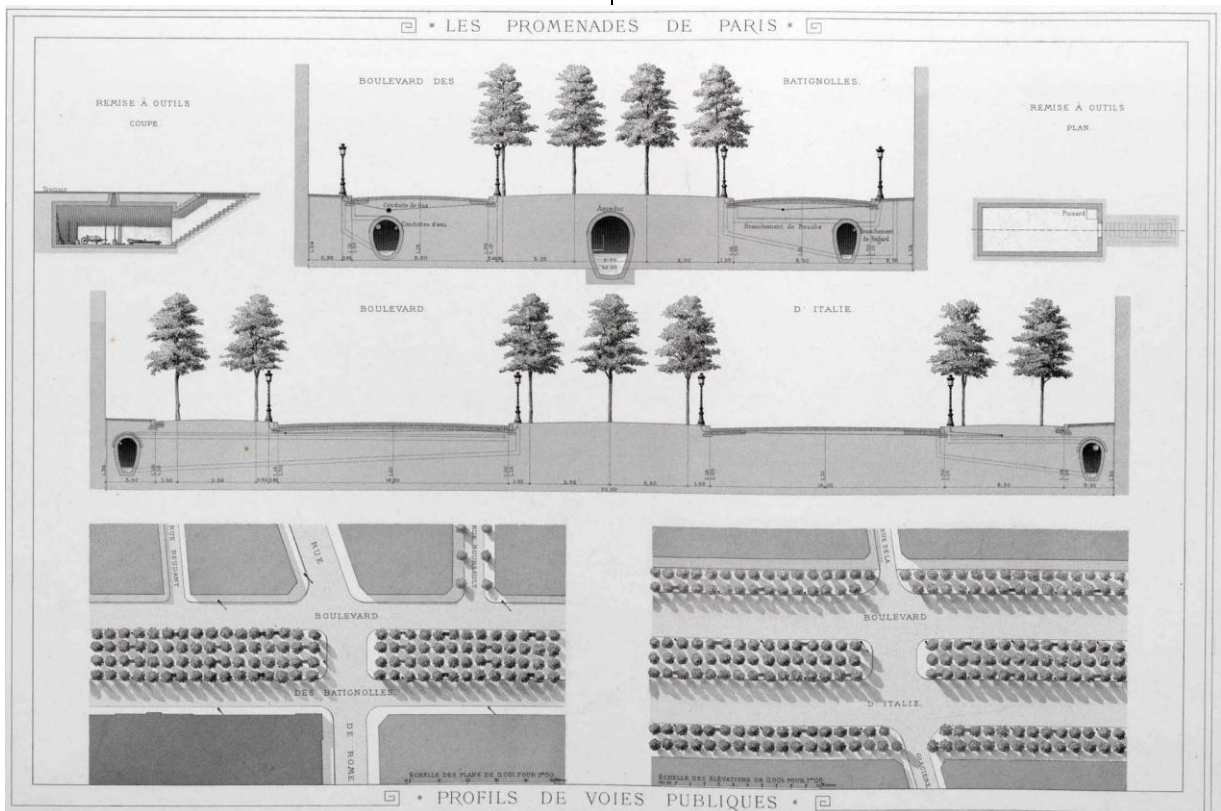




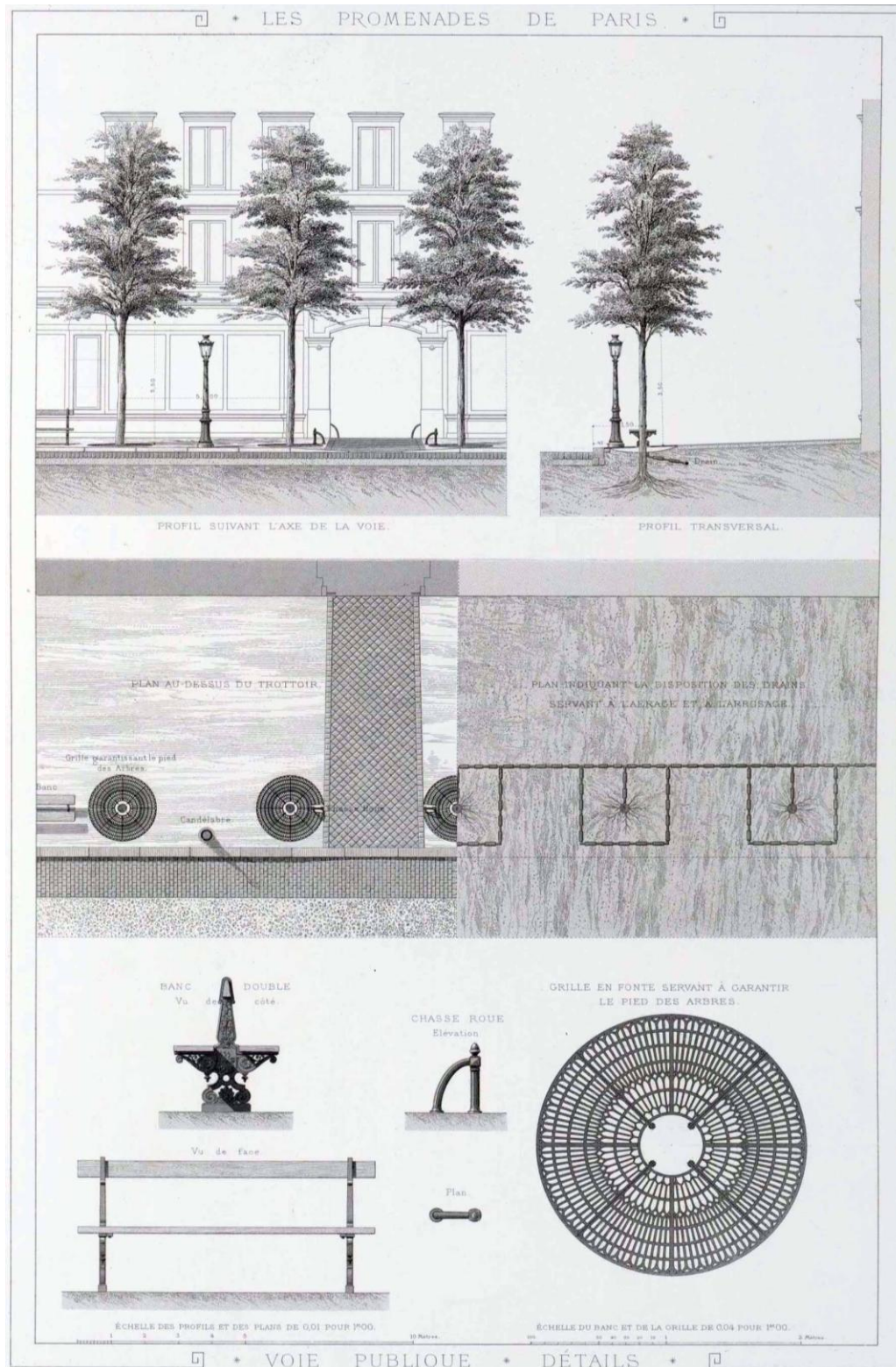




(Left and right pictures from Fontes D'art)







**Fig. 13** Details of street lights, tree alignments, streets, sidewalks, underground section, sewers, and street furniture (Alphand, 1867-1873.)

## Criticism of Haussmann

Haussmann's plans for Paris coincided with a time of intense popular political agitation and starting 1868 it faced much criticism on several levels; on the urban, social, and financial level, the fact that led Napoleon III in 1870 –after standing by him for many years– to relieve him from his duties as prefect to the Seine leaving Alphand as a successor. He was especially criticized by the Emperor's political opponents like the newly assigned Prime Minister Emile Ollivier, statesmen Adolphe Thiers, Jules Ferry and Jules Simon, among others.

Many archeologists, historians, writers, and impressionist artists lamented the disappearance of medieval Paris, the Paris of Balzac and Voltaire and was reflected in their work like the historian Léon Halévy, Victor Hugo, Emile Zola's *La Curée*, Charles Baudelaire's *Le Cygne* and *Tableaux Parisiens* from *Les Fleurs du mal*, to name a few.

He was accused of destroying the old and historic parts of the city by all the 'percée' that he was executing. Many historic and monumental residences were destroyed due to his determination to keep the rectilinear streets and many areas were left with wide open spaces and large means of communication which made it difficult for pedestrians to go from one place to another.

This procedure of 'percement' was long and costly that took everything that stood in its way and was widely used during the mid 19th and early 20th century. In the name of hygiene, modernization, and circulation, it was believed that the old town should be opened up with large rectilinear and longitudinal streets in order to improve its poor conditions, and embellish it. This procedure was also officially known as 'eventrement' in French and 'sventramiento' in Italian which literally means 'disembowelment' or 'gutting' of the city (Florensa, 1957). Haussmann himself wrote that it was a conquest of old Paris, the 'eventrement' and undertaking of the unhealthy neighborhoods:

*"C'était l'éventrement du Vieux Paris, du quartier des émeutes, des barricades, par une large voie centrale, perçant, de part en part, ce dédale presque impraticable, accostée de communications transversales, dont la continuation devait compléter l'œuvre ainsi commencée"* (Haussmann, 1893: 54).

*"Je me sentis, des lors, fermement en selle, pour aller à la conquête du vieux Paris, avec une armée que se prenait de confiance pour son nouveau Chef, et dont le concours, de plus en plus assuré, me permettrait d'entreprendre l'éventrement des quartier de ce centre de ville aux rue enchevêtrées, presque impraticables à la circulation des voitures : aux habitations resserrées, sordides, malsaines, que étaient, pour la plupart, autant de foyers de misère et de maladie, et de sujets de honte pour un grand pays comme la France"* (Haussmann, 1890b: 257).



**Fig. 14** The 'eventrement' of Avenue de l'Opéra. Construction sites of Butte du Moulin and Rue d'Argenteuil above, and Rue Saint-Roch below showing the amount of destruction and expropriation (Marville, 1862)



Hausmann was blamed for an increase in rents and social disruption caused by the demolitions where many Parisians and low-income families had to be displaced to more affordable areas like the margins of the city. This enhanced the inequality between the working class and the bourgeois that controlled all political and economic power and affected every sector including the urban development of cities.

Moreover, he was charged with all kinds of impropriety and accused of recklessly squandering of money and over passing the budget or as Harvey put it the “*official disavowal of Hausmann’s slippery financing in the face of fiscally conservative bourgeois critics*” (Harvey, 2003:297). This led statesman Jules Ferry to write the pamphlet ‘Les Comptes fantastiques d’Hausmann’ published in 1868 –which was a play-on-words from Jacques Offenbach’s opera fantastique ‘Les Contes d’Hoffmann’– which by *comptes* he meant accounts.



**Fig. 15** Daumier’s Nouveau Paris 1862 capturing the intense traffic brought with Haussmannization. “Comme c’est heureux pour les gens pressés qu’on ait élargi les voies des communication!!!” (Daumier, 1862. Fine Arts Museum of San Francisco).



**Fig. 16** Haussmann’s fall was accompanied by negative campaigns to discredit him. In Mailly’s cartoon he is shown as a thief due to all the destructions (Harvey, 2003).

On the other hand, one cannot deny that he had also supporters who defended him for all the promenades, parks, squares, gardens, and sewage system created. In addition, these kinds of plans had already started before Hausmann. Before him Paris was not in a “*period of inaction*” (Harvey, 2003: 80). As Harvey asserted:

*“[Hausmann] did not begin from scratch, and owed an immense debt to these pioneering ways of thought (he surely read Daly’s Revue). The problem for him was that these ideas*

*arose out of political presuppositions and utopian dreams that were in many respects anathema to Bonapartism. Hence the myth that Haussmann propagated of a radical break. That much of what he did was already present in embryo in the 1830s and 1840s does not, however, detract from the fact that modernity, as argued in the introduction, entered a new and distinctive phase after 1848 and that Haussmann contributed immensely to how this new form of modernity was articulated” (2003: 82, 83)*

Persigny justified that the Emperor had already planned these projects with Berger, and during Haussmann’s time he was aware of all these matters, and yet issues of budget and costs did not matter to him; all that mattered was the transformation of Paris:

*“J’avais plusieurs fois expliqué à l’Empereur le système financier proposé par moi pour les travaux de la capitale, je ne crois pas, toutefois, qu’il y eût fait grande attention ; car, en général, et comme si son esprit répugnait à s’y appliquer, il prenait peu d’intérêt aux questions de finances. Ce qu’il voyait de plus clair dans tout ceci, c’est qu’il s’agissait de faire de grands travaux dans Paris, d’améliorer les conditions des classes populaires, de détruire les quartiers malsains, de faire de la capitale la plus belle ville du monde, toutes choses qu’il désirait ardemment et qu’il ne cessait de nous recommander. Toujours passionné pour les améliorations, pour les grandes choses, il avait étudié depuis longtemps, sur les lieux mêmes, les divers projets à exécuter dans Paris” (Pesigny, 1896: 256)*

Despite the fact that the projects had already started before Haussmann, and every step was approved by the Emperor it was him who faced all the criticism:

*“M. Haussmann a donc admirablement justifié le choix qui avait été fait de lui. Pour être juste, il faut dire cependant que ce n’est pas lui qui a donné l’impulsion aux grands travaux de Paris, car cette impulsion avait été donnée par l’Empereur lui-même, sous M. Berger. [...] Dans le cours de cette guerre à outrance, guerre d’embûches, d’embuscades, où il a été vingt fois sur le point de succomber, où il est presque étonnant qu’il ait survécu, il a dû m’adresser mentalement bien des actions de grâces pour le conseil que je lui avais donné et qu’il a scrupuleusement suivi, à savoir de ne rien entreprendre, de ne rien commencer sans avoir fait tracer le projet sur la carte de Paris, par la main de l’Empereur, sans avoir rattaché la personne même du souverain par le lien le plus intime à chacun des actes de son administration” (Pesigny, 1896 : 259, 260).*



**Fig. 17** Boulevard Montmartre after the ‘eventrement’ (Pissarro, 1897. Metropolitan Museum of Art).



**Fig. 18** Avenue de l’Opéra after the ‘eventrement’ (Pissarro, 1898. Philadelphia Museum of Art).

## Spain's Hygiene Awareness and Barcelona's Suffocation

Spain also witnessed a hygienist movement and several doctors and scientists were prominent like Ignacio María Ruíz de Luzuriaga (1763-1822) and Mateo Seoane Sobral (1791-1870) who had great influence on Francisco Méndez Álvaro (1806-1883) and Pere Felip Monlau (1808-1871) where the latter played an important role in public hygiene and legislation (Alcaide González, 1999). Dr. Monlau<sup>23</sup> wrote his memoir on public hygiene in 1847 –with improved later editions in 1862 and 1871– where he stated that public hygiene is important for the happiness and well-being of the population and it shows nothing but wise management and good governance.

*“La higiene pública viene à ejercer en la sociedad la misma influencia que el poder legislativo y que la Administración. Un curso de higiene pública no es, en rigor, más que un vasto y minucioso programa de sàbia administración y buen gobierno; y si la higiene privada es la virtud, constituyendo con sus preceptos la felicidad individual y domestica, la higiene pública es la salud y la moral universal, tendiendo à crear la felicidad de los pueblos. [...] La higiene pública, más bien que una parte de la Medicina, es la Medicina entera aplicada al doble objeto de la institución de las leyes y de la administración de los pueblos”* (Monlau, 1862a: 4, 5).

Monlau discussed hygiene thoroughly in all its aspects, from air to cemeteries, from water to exercising, from clean hospitals to sanitary norms and legislation. Moreover, he stressed on the importance of clean streets and the creation of squares, gardens, and parks planted with trees and street furniture. He added that every neighborhood, especially subordinate ones, should possess at least one square that serves as a place of rest, of sunlight, and ventilation; facilitate circulation; and decrease density.

*“Además de las calles, deben las poblaciones tener plazas, por lo mucho que estas contribuyen a la renovación del aire. Sirven además para las ferias y mercados, para las fiestas públicas, para reunirse y pasear los habitantes, etc. [...] Cada barrio, al menos, debiera tener su plaza espaciosa. [...] Con razón, he dicho, pues las plazas vienen a ser vastos almacenes o depósitos de aire, favorecen la circulación de este, y disminuyen la densidad de la población aumentando la extensión relativa del espacio ocupado por cierto número de casas* (Monlau, 1862a: 96). *Así como las calles y plazas para la circulación interior han de estar bien empedradas y limpias (68), así también el piso de los paseos ordinarios ha de ser llano, y estar siempre limpio. –Ha de haber en los paseos arboles, estatuas, poyos o bancos, cenadores, fuentes, surtidores, etc.”* (Monlau, 1862b: 596, 597).

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<sup>23</sup> Pere Felip Monlau i Roca was a doctor in medicine, a political leader, and one of the first to introduce hygiene theories in Catalunya. Before he wrote his first edition of *Elementos de Higiene Pública o Arte de conservar la salud de los pueblos* in 1847, he wrote a report on Barcelona's Roman walls, *Abajo las Murallas!!!*, in 1841. His scientific theories and ideas on hygiene were developed during his exile in France (1837-1839) where he was introduced to European medicine mainly through French authors such as Londe, Tourtelle, Levy and Tardieu among others (Magrinyà, 2008).

He gives examples of other European cities, like Paris, London, Vienna, and Florence, referring to them as 'models'. Unfortunately, the subordinate areas in all cities either lack open green spaces or possess a small number –usually in a state of degradation and abandonment– which proves the neglect of policies: *“Pero en cambio, las mas de las poblaciones subalternas carece de verdaderos paseos, o los tienen mezquinos, o en corto numero, o se hallan en su estado de degradación y abandono que revela el mas craso descuido de todas las reglas de policía”* (Monlau, 1862b: 598).

In the mid 19<sup>th</sup> century, cities in Spain were suffering from the same epidemics and bad conditions as the rest of the European cities. Catalonia was called 'Catalan Manchester'<sup>24</sup> and it was known to be “the factory of Spain” (Busquets, 2005). Barcelona, since the 1830s, found itself in the same population and industrial growth. New factories and industries were springing all over the city, among them; Bonaplata Mill, Espanya Industrial, La Maquinista Terrestre y Maritima, Ricart i Cia, Batlló Textile, etc. Citizens moved from rural areas into the city in search of work which resulted in a demographic change and urban growth to be able to accomodate all the migrant waves and necessary manpower needed for the large manufacturing plants and constructions. This fact left the city oversaturated, unhealthy and in an unstable political and social tension.

As a matter of fact, Barcelona was a contradictory city that on one hand had a growing economy and majestic plazas like Plaça Reial, and on the other hand, had problems with the working class that suffered the most from unhealthy conditions, and poverty (Busquets, 2005).

*“Las duras condiciones laborales, la insalubridad de las viviendas, la insuficiencia de los equipamientos e infraestructuras asistencial y sanitaria repercutían en la vida y en la muerte de la población de la ciudad, en especial las clases obreras, dando lugar a una elevada mortalidad”* (Capel, Tatjer, 1991: 240).

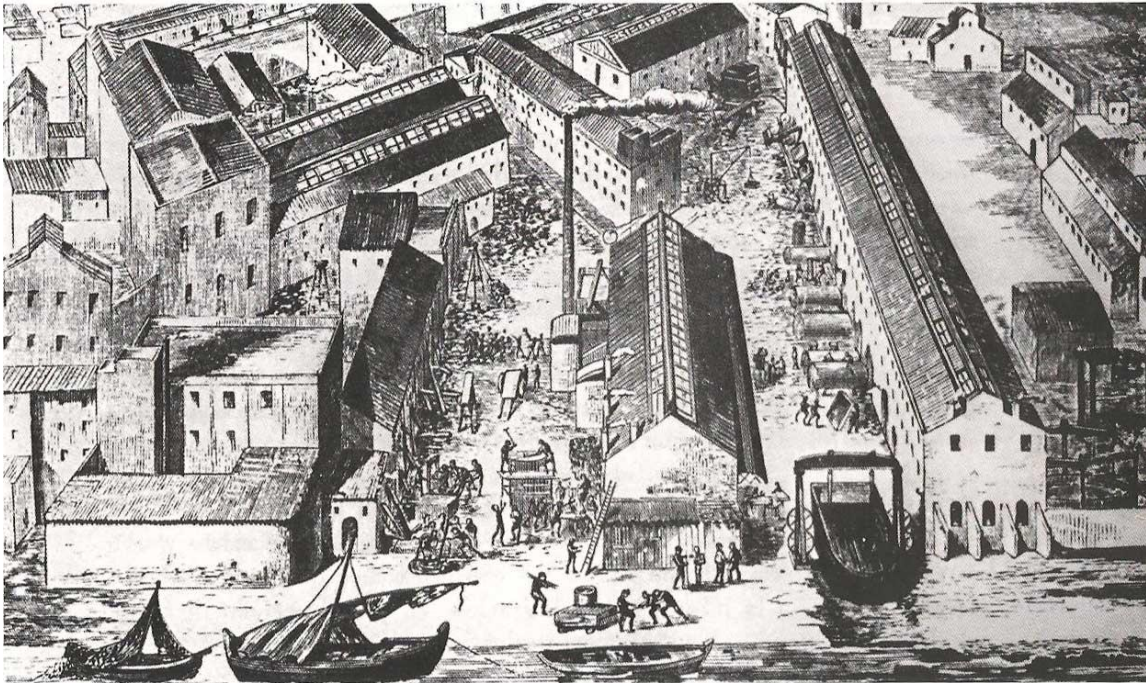
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<sup>24</sup> A term given to it by the British writer Charles W. Wood.





**Fig. 19** View of Espanya Industrial textile industries in Sants built in 1847 (Mariezcurrera , 1870. AFB.)



**Fig. 20** Engraving of La Maquinista Terrestre y Maritima founded in 1855 (Arxiu Màs. In Busquets, 2005)

Barcelona of the mid 19th century maintained, more or less, its medieval topography, enclosed by Roman walls. By the 1850's the old town became very overpopulated (150,000 inhabitant in an enclosed perimeter of 64,000), increasingly dense and degraded where spaces for new urban, economic and industrial functions were lacking (Busquets, 2005). It was occupied with hospitals, barracks, slaughterhouses, and cemeteries. In addition to that, there was no sanitary infrastructure, buildings exceeded their height limits and the blocks' interior spaces were completely occupied all causing lack of ventilation, clean

water, insalubrity and topping that another cholera epidemic outbreak in 1855<sup>25</sup>. The city was suffocating within its own walls. The only urban land reserve was in 'Pla de Barcelona' or the Barcelona Plain threatened with uncontrolled growth (Nicolau, Fuster, Venteo, 2001). Therefore, discussions had started about the necessity of an expansion, –'ensanche' in Spanish or 'eixample' in Catalan– beyond the old historic town.

*"To speak of sanitation or of ensanche is then, to speak of the essential nature of 19<sup>th</sup> century urbanism, of the expansive, clarifying undertaking that took the form of broad streets, larger plots, well-aired homes, urbanized spaces. It is therefore natural that 'Ensanche' and 'Sanitation' should have come together so frequently in projects and proposals, in conjunction with the concept of 'Remodelling' "*(Solà-Morales M., 2010: 44).

Monlau was in favor of the new ensanche and above all of demolishing the walls, as in the words of Busquets: "[he] was one of the staunchest champions of demolition: the need to improve hygiene conditions in order to reduce illness was vital" (Busquets, 2005: 117).

In parallel, there was a political instability associated with tensions and debates between moderate and progressive liberal parties concerning the demolition of the walls<sup>26</sup>.

However, the tangible consequences of industrialization, in general, and the opening of the railway from Barcelona to Mataró (1848), in particular, verified the inevitability of a new stage of progress in which it was necessary to adapt to the social and political needs and framework (Magrinyà, 2008).

Monlau –involved in the progressive movements himself– described in his 1841 report 'Abajo las Murallas!!!' the crowdedness, bad living conditions, insufficient public health, and high mortality in this walled enclosure. Nonetheless, some moderate or even conservative figures like the priest and philosopher Jaume Balme were welcoming the idea of demolition and through the magazine 'La Sociedad' he proposed the "*notion of an unlimited city against a walled city*" (Magrinyà, 2008; Torres, Llobet, Puig, 1985).

Monlau depicted the wall as a sign of fortification, inhumanity and control. Its presence, in modern times is redundant especially that with the increase in population many cities are tearing down their walls and expanding beyond their old town's border.

*"Nuestras calles son jeneralmente angostas, la circulacion de las personas por ellas espuesta, a causa del continuo carreteo y trasporte que exigen el comercio y la industria; las casas altas, ahogadas, con cuatro pisos jeneralmente y cuarenta o cincuenta moradores en cada una de ellas (1); cada dia van desapareciendo los huertos, los jardines y las casas*

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<sup>25</sup> Cholera epidemics in 1834, 1854, 1865, and 1885; yellow fever in 1870 and 1885; and later tuberculosis

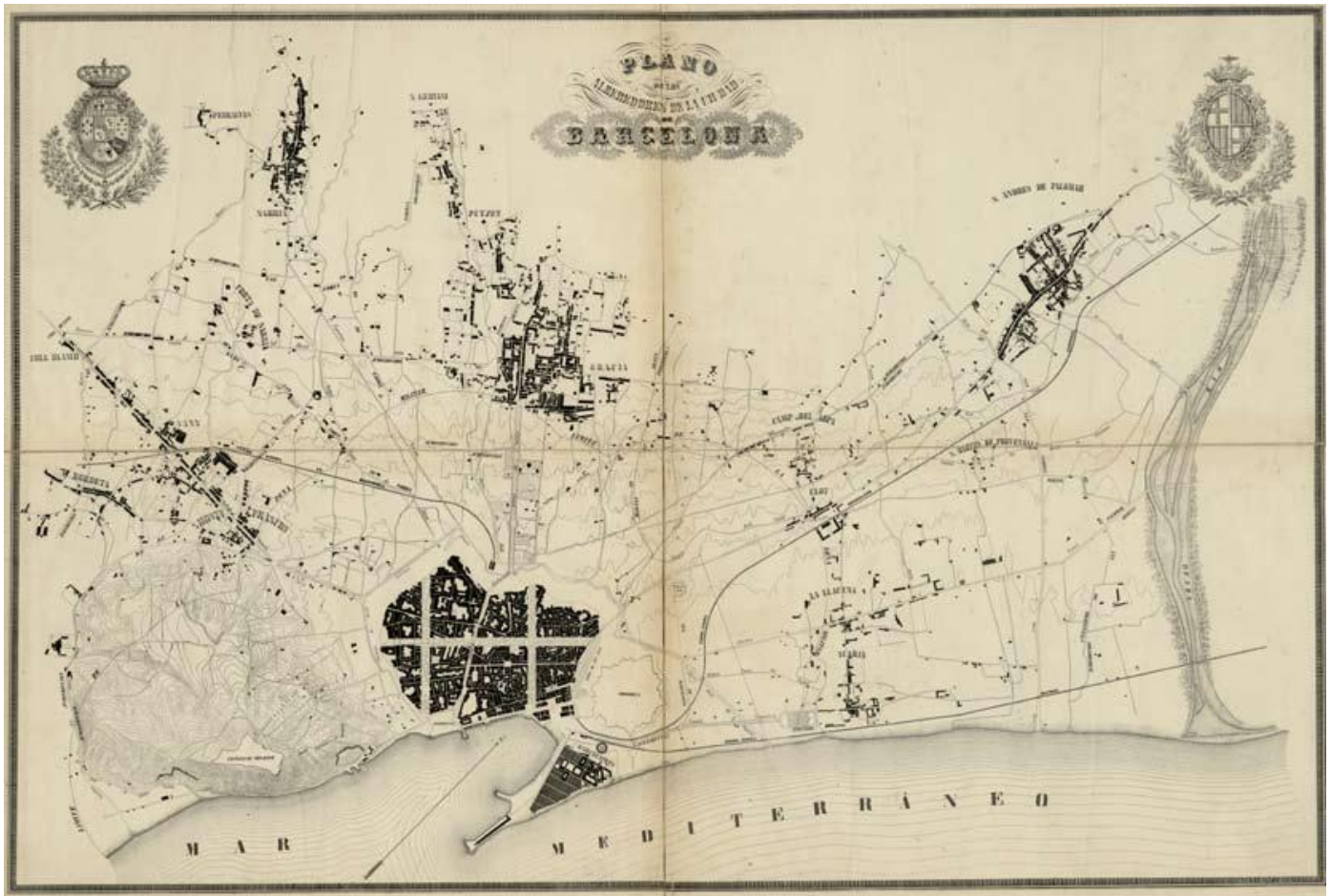
<sup>26</sup> With the Bourbon troops taking over the city in 1714 the city had been regarded as a stronghold and governed by the Captain General. In the early 19<sup>th</sup> century citizens began to demand the wall's demolition. The history of its demolition is complex and had been one of the major topics of discussion in Barcelona's society between 1841 and 1843. For more information check GARCÍA-BELLIDO. MANGIAGALLI. Pascual Madoz y el derribo de las murallas en el albor del Ensanche de Barcelona. *Barcelona Quaderns d'Historia*, 2008, no.14, p. 165-210.



*antiguas de alguna comodidad, para construir en su lugar casitas mezquinas, con nichos en vez de salones y cuartos; en una palabra nos vamos ahogando” (Monlau, 1841: 13)*

If a city wants to improve its situation then:

*“Entonces se quisiera que la población no estuviese tan condensada y encastillada; que tuviese anchas calles y espaciosas plazas’ que los edificios no fuesen tan altos, y estuviesen mejor ventilados; que en el centro de la población no hubiese hospitales, cárceles, no otros establecimientos insalubres, etc.” (Monlau, 1862a: 304).*





**Fig. 21** The enclosed old town below with the Barcelona Plain and the neighboring towns above (Cerdà, 1855. AHCB. 1860)

In Monlau's opinion, the total or partial demolition of the Roman walls, for the sake of public health, provided:

better ventilation, streets and squares; a comfortable life for citizens; easiness in displacing unhealthy establishments; a growth in economy and production such as an increase in industries, business, and land price; and a decrease in intramural rents due to the *ensanche*.

He added that this idea of urban progress could face resistance from landowners, authorities responsible for the gateways to the city, and military<sup>27</sup> oppositions interested in preserving the fortification.

As a matter of fact, the first expansion projects were drafted from a military perspective of extending the walled sector and accommodating a new urbanized sector like Juan Cortés de Rivera's fortified expansion project around Passeig de Gràcia in 1846, and Francesc Daniel i Molina's project in 1853 (Magrinyà, 2008). But with time the military authority on regulations and urban matters was gradually assigned to municipalities.

<sup>27</sup> During the 18<sup>th</sup> century military engineers led the public works in Spain which resulted in diverse projects among them the construction of Barceloneta neighborhood in 1753 commissioned by the Captain General Marquis of la Mina to the military engineer Juan Martín Cermeño and execution director Francisco Paredes. It was a project already started in 1715, after the demolition of La Ribera neighborhood in 1714, designed by engineer General Prosper Verboom, the creator of Ciutadella, and ratified by the Royal Order in 1718. The issue of the wall created a clash between the military authorities and the citizens which resulted in bombing the city from the fortress of Montjuïc ordered by General Espartero in 1842.



## 2 TOWARDS AN EXPANSION OF BARCELONA

In the aftermaths of the bad conditions, the epidemics and the working class strike in July 1855, the City Council and government<sup>28</sup> had to find adequate solutions that eventually led to political changes, and the arrival of the Bienio Progresista<sup>29</sup> was a starting point to the modernization of the city and its urban structural transformation that would shape the city and urban planning as we know it (Magrinyà, 2008; Nicolau, Fuster, Venteo, 2001).

However, the debates concerning the demolition of the walls remained until finally the decision of tearing it down definitively was made possible with the publication of the Royal Order of 12 August 1854, a moment from which the Civil Governor commissioned Ildefons Cerdà i Sunyé to develop a topographic survey and study of Barcelona's plain and the City Council commissioned architect Miquel Garriga i Roca in surveying the existing city<sup>30</sup>. The demolitions started in 1854 and lasted till 1868 where the walls facing the sea were finally removed and the Ciutadella disappeared making way for a large park that was one of the projects of the 1888 Universal Exposition. The only fragments remained standing is near the Drassanes shipyard and Portal de Santa Madrona which the latter still exists nowadays.

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<sup>28</sup> In the 19<sup>th</sup> century, the military authority on regulations and urban matters was gradually assigned to municipalities.

<sup>29</sup> Since 1843 the political system of the reign of Isabella II was dominated by the Moderate Party and after several events and oppositions the power was handed to the Progressive Party from July 1854 to July 1856 a period known as Bienio Progresista. During which time many progressive decisions were made including tearing down the wall in Barcelona.

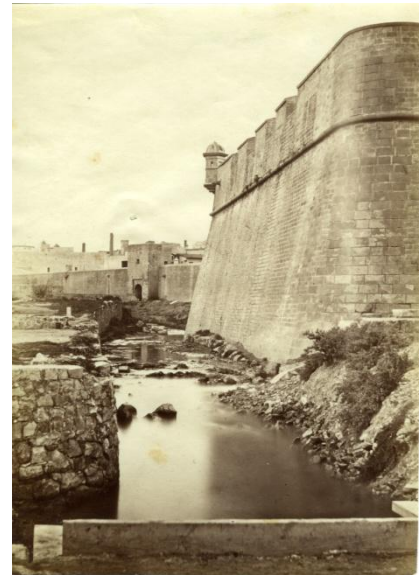
<sup>30</sup> Miquel Garriga i Roca produced a map of Ciutat Vella in 1858 which was a reflection of the urban fabric's situation at that time. *"On the basis of this document, in 1892 Garriga proposed his Plan of Alignments and Improvements, which concentrated on correcting the lack of space in the city's historical layout"* (Busquets, 2005: 110).



**Fig. 22** View of Ciutat Vella during the demolition of the walls with some ramparts still standing. The esplanade shown in the foreground is what will become Plaça de Catalunya and in the background the Citadel that will become Parc de Ciutadella (Alsamora, c1855. AHCB)



**Fig. 23** Walls demolitions. View of Baluard el Rei de les Drassanes (Unknown, 1880-1889. AFB)



**Fig. 24** View of baluard del Rei de les Drassanes with Portal Santa Madrona in the back (Unknow, 1860-1869. AFB)

According to Bohigas (1963) the ensanche of Barcelona is linked to the demolition of the walls and that of Ciutadella<sup>31</sup> (1848) –which in itself played an important role in the decision of the demolition– and this subject was for many years affecting the city's political and social situation.

Prior to the implementation of the ensanche project, Cerdà presented to the state a preliminary project for the Barcelona Plain 'Memoria del Ante-proyecto del Ensanche de Barcelona' in 1855, and a comprehensive analysis and survey on the working class's situation in 'Monografía estadística de la clase obrera de Barcelona en 1856' (Statistical report on the working class)<sup>32</sup>. The progressive politics during those years allowed the introduction of his ideas both in Barcelona and Madrid but the change in politics in 1856 and the new conservative City Council decided to commission Miquel Garriga i Roca to develop an alternate preliminary project. However, Cerdà requested the authorization to continue working on his ensanche plan and develop his theories at his own expense.

In need of an official plan for the extension<sup>33</sup>, in 1859 the City Council announced an open competition for which 14 projects<sup>34</sup> were submitted and among them, architect Antoni Rovira i Trias's radiocentric design 'Plano del Proyecto de Ensanche de la Ciudad de Barcelona', and Ildefons Cerdà's Eixample 'Plano de los Alrededores de la Ciudad de Barcelona y Proyecto de Su Reforma y Ensanche' (Bohigas, 1963; Solà-Morales M., 1978). Meanwhile, a Royal Order of June 1859 issued by the Ministry of Public Works and Economy approved Cerdà's project with slight modifications. The City Council reacted to the decision and, in November of the same year, announced Antoni Rovira i Trias as the winner. It is relevant to note that this controversy on urbanizing the city was marked by several circumstances among them: First, the struggle for control between the central government and the City Council, even political changes and conflicts in the City Council itself; second, the economic issue since Cerdà's plan required many expropriations

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<sup>31</sup> Bohigas pointed out that they several historical successive episodes took place that led to the demolition: "*la decisió, el 1841, de la Junta Suprema de Vigilància d'iniciar l'enderroc de la Ciutadella enmig d'un entusiasme popular i la consegüent repressió de Van Halen, que, ensem amb altres fets de tot ordre, va alimentar l'aixecament del 42 contra Espartero, que va acabar amb el famós bombardeig sobre la ciutat des de Montjuïc, amb la destrucció de 462 edificis, i l'ordre de reedificar la part enderrocada de la Ciutadella; el decret de Serrano de 1843 ordenant l'enderroc i el pròxim desgraciat episodi de la Jamància i la dissolució de la Milícia Nacional, amb l'ordre de reconstrucció de la part enderrocada de les muralles; finalment, la revolució de juliol del 1854, que inicia altre cop l'enderroc i la posterior confirmació, per part del govern progressista d'Espartero i O'Donnell...*" (Bohigas, 1963: 81)

<sup>32</sup> The former became integrated in 'Teoría de la Construcción de Ciudades aplicada al proyecto de Reforma y Ensanche de Barcelona' and the latter a part of the vol. II appendix of 'Teoría general de la urbanización y aplicación de sus principios y doctrinas a la reforma y ensanche de Barcelona'

<sup>33</sup> Although it was a little late, in 1857 and after approving local bylaws, Figuerola, Martí de Eixala y Muns tried through established measures to curb the heights and improve the conditions but it seemed that the best solution was the new eixample.

<sup>34</sup> Some of the other main projects were that of Francesc Soler i Gloria, Francesc Daniel Molina, Josep Fontserè, and Miquel Garriga i Roca. For more information on the main projects a comparative study can be found in Manuel de Solà-Morales, 1978 'El proyecto Cerdà frente a sus alternativas' in *Los Ensanches I*.

resulting in a huge amount of financial compensation to land owners; third, the professional confrontation that existed during the 19<sup>th</sup> century between engineers and architects –and was at its peak in Spain in the 1840s<sup>35</sup>– to the extent that during the Exposition of the projects Cerdà being an engineer and the other contestants being architects, presented his project in a separate Council hall. This was an important issue that affected city building and planning in all European cities.<sup>36</sup> In fact, it wasn't only a struggle between engineers and architects or as Daly<sup>37</sup> puts it *constructeurs savants* and *constructeurs artistes* but also between science and art.

*“Ce sont là des matières incomplètement réglées dans nos codes et décrets administratifs, imparfaitement ou même souvent mal comprises des juges eux-mêmes qui, parfois imbus des vieilles traditions de la jurisprudence, confondent alors dans leur esprit quelque chose des fonctions de l'architecte avec celles de l'entrepreneur, professions autrefois rarement tout à fait distinctes, mais devenues aujourd'hui complètement séparées”* (Daly, 1870: 14)

Mainly, engineers managed to gain a progressive frame, while architects a more conservative and political one (Bonet, Lorenzo, Miranda, 1985). Daly questioned and criticized this misunderstood prejudice, rivalry, and hostility pointing out that the conflict was immense until the mid 19<sup>th</sup> century from which point onward engineers had approached more aesthetics and architects more science. Despite this, he argued that after all both groups are distinct but complementary to one another with the same complex purpose that of *“l'art de bâtir”*.

*“Depuis le commencement du siècle, architectes et ingénieurs se regardent, chez nous, avec plus d'étonnement que de bienveillance. On croirait le dieu a+b et la déesse Fantaisie en train de se dévisager réciproquement. Pourquoi cette hostilité, ou du moins ce défaut d'accord ? [...]*

*Deux faits, ce me semble, nous restent acquis en vertu de ce qui précède. Le premier, c'est que, pendant le premier tiers du siècle, il y eut erreur et excès de la part des architectes comme de celle des ingénieurs dans leur manière de comprendre l'art de bâtir et l'esthétique architecturale, les architectes négligeant beaucoup trop le côté scientifique de leur profession, et les ingénieurs se méfiant grandement de tout caractère esthétique, le dédaignant même souvent, contrairement à l'exemple de leurs illustres ancêtres, les*

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<sup>35</sup> Professional rivalry and political positions became so apparent that, for a while, with every change of regime that leaned towards the right was almost followed by dissolving the Association of Engineers and closing the School of Engineers (Bonet, Lorenzo, Miranda, 1985).

<sup>36</sup> Similar conflicts between architects and engineers, with similar political connotations, arose in France (Ingenieurs civils français 1973; Deswarte, Lemoine 1978) and in Italy (Morandi 1976).

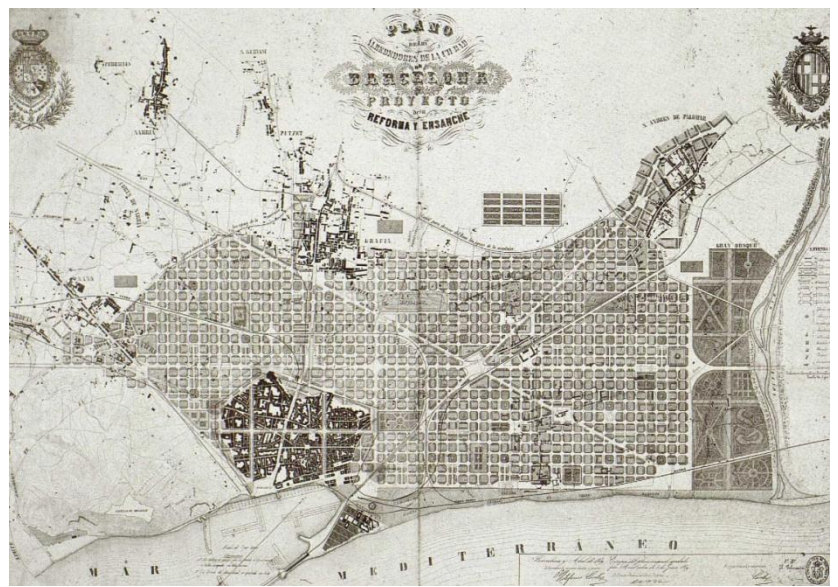
<sup>37</sup> Concerning the issues between architects and their 'cousins' the engineers, in 1877 architect César Daly made a plea to the French association of architects at an international congress in connection to the Universal Exposition that was to take in Paris the following year. The plea was addressed to engineers. Two of them were present at the congress: M. de Dion president of 'Société des ingénieurs civils' and head of metallic constructions of that same 1878 Universal Exposition, and M. Castel secretary of the Chemins de Fer du Nord. The plea was later more developed and published in the *Revue General de l'Architecture et des Travaux Publics*, 4e Série, Vol. IV, 1877.



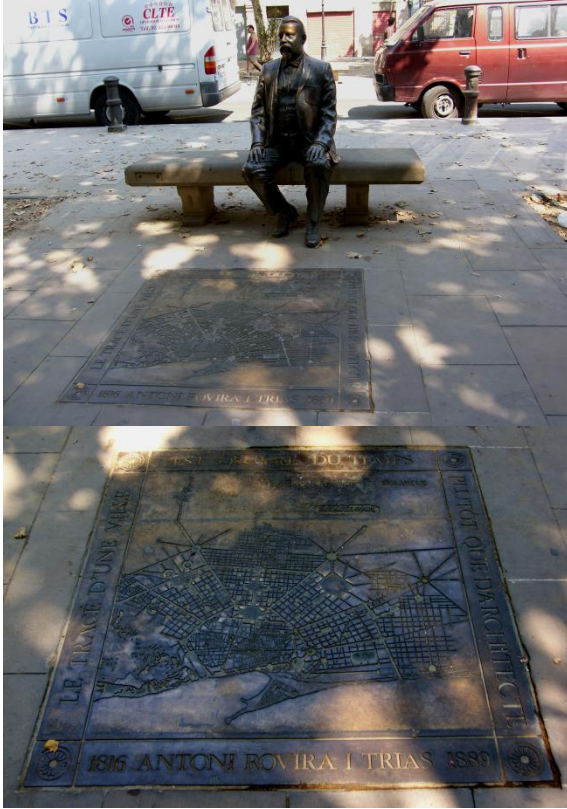
*Châtillon, les Vauban, les Bélidor et les Perronet. Le deuxième, c'est qu'aujourd'hui les architectes et les ingénieurs sont plus éclairés et mieux inspirés qu'autrefois : des ingénieurs contemporains étudient l'histoire de l'architecture, écrivent même de beaux et bons livres sur la matière, et invoquent le concours des architectes, et le cas est fréquent ; tandis que de leur côté les architectes se préoccupent grandement des sciences relatives à l'art de bâtir"* (Daly, 1877: 4-10).

Finally, in 1860, the Ministry of Public Works and Economy confirmed its definite approval of Cerdà's project after offering a compromise with the City Council by disapproving his economic and ordinances proposals.

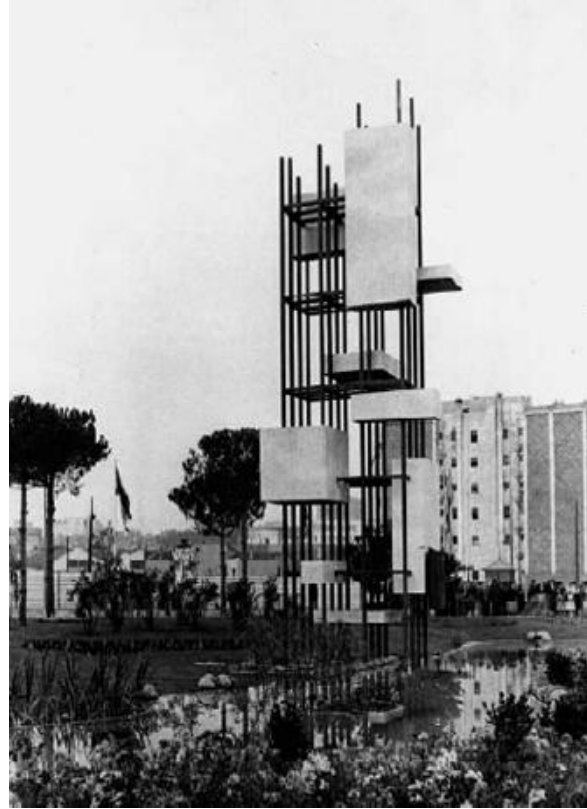
*"Nonetheless, this was a highly singular moment in city development, and the choice of the Cerdà Project undeniably marked the process and the shape of Barcelona. It might be said that the forcefulness of this Plan made it a paradigm model for new towns built in southern Europe"* (Busquets, 2005: 121).



**Fig. 25** Radiocentric Plan of Rovira i Trias versus the grid Plan of Cerdà (1859. AHCB)



**Fig. 26** 'To Rovira i Trias', 1990, by Sculptor Joaquim Camps and architect Jaume Graells in Plaça by the same name in Gràcia (Fabre, Huertas, 2004. Art públic)



**Fig. 27** 'To Ildefons Cerdà' by Antoni Maria Riera Clavillé placed in 1959 in Plaça Cerdà, no longer exists since 1970. "No monument to Cerdà stands today in the streets of Barcelona" (Remesar, 2004, Art públic)

In addition to Cerdà's project, another extension project was being developed in Madrid commissioned to engineer Carlos Maria de Castro and approved 1860. With Barcelona's new plan as an example and basis, the Parliament decided to draft legislation for planning and expanding other Spanish cities. After political debates, the first intents were the adoption of the 'Ley General para la Reforma, Saneamiento, Ensanche y otras Mejoras de las Poblaciones' in 1861 that was modified and approved in 1864 under the name 'Ley de Ensanche' (Eixample Bylaw) along with its implementation regulations in 1867<sup>38</sup>. This law and its regulation controlled and specified the way the extension plan should be executed considering urbanization, expropriation, construction, compensation, and technical, economic and social matters. It declared the public utility of properties for providing streets, squares and markets to justify expropriation. It gave land owners the power to urban development and the free cession of their land. As Solà-Morales clarified:

<sup>38</sup> In 1876 a new law was enacted under the name 'Ley de Ensanche de Poblaciones' and its permanent version enacted and approved in 1892 and its regulation in 1893, both for Madrid and Barcelona, under the name 'Ley de Ensanche de Madrid y Barcelona'.

*“El debate político en el intermedio, puso el énfasis en dos argumentos: uno, por supuesto, el refuerzo del papel de los propietarios de terrenos en la formación de comisión de fomento (“Comisiones de Ensanche”) para administrar las zonas de extensión por si mismos (con mayor independencia del control municipal), la otra, las intenciones “sociales” de convertir los planes de ensanche en un programa de vivienda, dando énfasis a la necesidad publica de previsión barata y no monopolística de terreno urbano” (Solà-Morales M., 1978: 19, 20).*

As a result, ensanche plans were launched and approved in other cities such as in Bilbao 1863 (Eng. Amando de Lázaro); San Sebastián 1864 (Arch. Antonia de Cortázar); Sabadell 1865 (F. Daniel Molina); Elche 1866 and Bilbao 1867 (Pablo de Alzola, Ernesto de Hoffmayer and Severino Achúcarro) (Capel, 2002; Solà-Morales M., 1978).

### **Cerdà's Plan for the New City**

Cerdà's research and projects where done in a context abundant with technological innovations endorsed with the Universal Expositions like that of London in 1851 and Paris in 1855. Gathering all his analyses and experiences from his former studies and visits to other European cities like Paris, Brussels, and Liège, Cerdà drafted the 'Proyecto de Reforma y Ensanche de Barcelona' and the 'Teoría de la Construcción de Ciudades aplicada al proyecto de Reforma y Ensanche de Barcelona' (TCC) in 1859 which were all the basis of his posterior master work 'Teoría general de la urbanización y aplicación de sus principios y doctrinas a la reforma y ensanche de Barcelona' (TGU) in 1867 (Capel, 2002; Magrinyà, 2008). He was inspired by Rambuteau and Haussman's transformation of Paris and taken by its boulevards and Alphand's famous gardens and urban furniture, *Les Promenades de Paris*, upon which Remesar formed 'Alphand- Davioud- Hittorff paradigm' in classifying the city (Remesar, 2005, 2007; Remesar, Ricart, 2013).

As early as his first works, he aspired to modernize the city and the urban practice through a 'scientific' discipline with the aim to control urban growth and adapt the city to new economic and administrative structure; connection and transportation needs; and hygiene requirements<sup>39</sup> (Capel, 2002; Magrinyà, 2008).

*“Per a aquesta nova generació, era fonamental entendre l'evolució de la ciutat com un procés, en el qual una actitud positivista havia de canalitzar la millora de la civilització, en lloc de quedar-se tan sols en un disseny idealitzat. L'esperit de reformador de Cerdà implicava conèixer la realitat existent abans de la reforma. Les seves primeres obres: l'avantprojecte d'eixample de Barcelona (1855) i la monografia de la classe obrera (1856)*

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<sup>39</sup> Many others wrote about Cerdà's theories found in a large literature, among others: Bohigas (1963), (1985); Rossi (1966); Choay (1980); Puig i Cadafalch (1927); GATEPAC (1931; 1934;1935; 1937); Sert, J.L.(1933); Estapé, F (1971); Sabaté (1999); Solà-Morales, M. (2010); Solà-Morales, M. Busquets, Domingo, Font, Gómez (1974); Fernández Ordóñez et al (1976); Corominas (2002); Busquets, Corominas (2009), Eizaguirre, Sabaté, Laboratori d'Urbanisme de Barcelona, Ed (1992); and Magrinyà, Marzá, (2009).



*entren plenament en l'esperit científic que busca elaborar una radiografia de la realitat, a l'estil d'una obra totalment coetània com Les ouvriers européens de Frédéric Le Play (1806-1882), publicada el 1855"* (Magrinyà, 2008: 93).

*"Para dar una idea de la urbanización en el terreno de la ciencia, diremos que sus elementos constitutivos son los albergues, su objeto la reciprocidad de los servicios y sus medios las vías comunes, es decir, de común aprovechamiento"* (Cerdà, 1867: 44).

And a concept of modernization in the context of progress as Capel defined it:

*"Modernización tiene que ver, evidentemente, con modernidad y, sobre todo, con moderno, algo, a su vez, íntimamente ligado a la idea de progreso. 'Moderno' expresa la aceptación de que la sociedad puede mejorar y superarse, siempre respecto a otro estadio anterior que se considera de menor perfección. La aceptación de la idea de modernidad implica, así, la de marcha ascendente y progresiva de la historia, y es típica del pensamiento europeo"* (Capel, 2006a: 9).

His work was a pioneer of modern urban theory and marked the shape of the city, however, it has been undervalued until recently (Remesar, 1997; Busquets, 2005).



**Fig. 28** Teoría de la Construcción de las Ciudades (TCC) 1859, and Teoría General de la Urbanización 3 volumes (TGU) 1867 (Any Cerdà).

Cerdà's plan covered the whole Plain –connecting to the surrounding towns of Gràcia, Les Corts, Sants, Sarrià, Sant-Gervasi, Sant Martí and Sant Andreu– were there was a completely empty 1.25km wide belt around the town wall (the shooting distance of the cannons) preventing construction due to military restrictions.

His main concern and objectives were circulation, mobility, and hygiene<sup>40</sup> *"that guides all his work on the Reformation and Extension of the cities and that will become a central issue in his*

<sup>40</sup> Gómez Ordóñez stated that the creation of the Development Ministry in 1851 *"marked a crucial institutional moment for the territorial transformations that took place in Spain as from that time onwards"* (1992: 381) and Solà-

urban theory" (Remesar, García Fortes, 2013: 130) and the same authors stated that "...Cerdà's ideas on the organization of the territory are based on a dual model. On the one hand the hygienist (public health) model, on the other a systemic model based on mobility (vias, roads, railroads...). For Cerdà, circulation, movement, is the central subject: movement of goods, services and people; circulation of air and light" (Remesar, García Fortes, 2013: 140), all for the purpose of providing a well-integrated, well-built, healthy city with a good quality of life.

"...there are two [criteria] which critics most frequently single out for special attention: hygiene and traffic circulation. Both play a very important and innovative part in the *Teoría General*, and their development is foremost in the theory of urbanization proposed. Cerdà's understanding of the streets as a subsystem of the county and regional road layout, and the city block as an *intervia*, a space between the streets, was a clear, hierarchical reflection of the degree to which he was concerned with the idea of circulation (the biological image of blood flow). The same could be said of environmental and hygienic conditions as definers of buildings and spaces, in the dwelling and in the street, as an obsession with residential and public salubrity. Hygienism and mobility were two well-known cultural and theoretical revolutions of the time" (Solà-Morales M., 2010: 40).

Cerdà's early studies and writings on hygiene and its primordial role in his works preceded, by almost thirty years, Ward-Richardson's *Hygeia. A City of Health* (1876), and this is due to the epidemics that he witnessed before and after 1855 (Soria, 1992).

Cerdà was careful in studying how the new city will occupy the territory, that is: the new urban layout in relation to the social and economic status; maximum size; occupation and orientation of parcels and dwellings; ventilation; light; insulation; courtyards; sanitary infrastructure; and the proper relationship between what he called the *via* (streets) and the *intervia*<sup>41</sup> (blocks in-between streets) (Remesar, García Fortes, 2013).

He tried to achieve this in his project through developing road networks, improving circulation, integrating the *ensanche* with the existing built environment, applying land parcels and subdivisions, and implementing infrastructure and urban services such as, railroads, new housing typology, sewage system, water drainage, water and gas supplies, and telegraph communication which were connected to the street and housing. As per

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Morales M. added that "The creation of the *Ministerio de Fomento* [Ministry for Promotion], in 1851, backed by functionaries in the form of a *Cuerpo de Ingenieros de Caminos* [Civil engineering corps'] that was enlightened and liberal at the time, was a decisive institutional moment for the country's future territorial transformations. These were the professionals who constructed the first modern roads, designed the *ensanches*, and observed and learned about the advance of the railway from foreign experts and financiers, and undertook the task of supplying Spanish towns and cities with piped water. The training of these technicians and their imitation of their colleagues was quite possibly the decisive first step in sanitation work" (Solà-Morales M., 2010: 43).

<sup>41</sup> In TGU Cerdà gave the blocks several names like *manzanas*, and *islas* but settled for *intervias* a more adequate and self-evident name. "Este, puede decirse, nos ha inspirado la palabra *intervias* que parecerá, á primera vista nueva, pero que en rigor no lo es, puesto que nuestros ingenieros para designar el espacio comprendido entre la doble vía de un camino de hierro, usan la expresión *entrevia*, que es la misma que nosotros adoptamos ligeramente modificada, porque hemos querido conservar la etimología de la lengua latina [...] La palabra *intervias* grafia con notoria sencillez la posición del espacio á cuya significado la hemos aplicado, y revela desde luego, no solo la manera de ser de ese espacio, sitio también el origen y causa de su existencia" (Cerdà, 1867: 365).

Magrinyà, *“de fet, Cerdà ha estat, a part del precedent puntual de Patte a Paris, el primer urbanista que ha incorporat, a l’escala de projecte, les xarxes de serveis urbans en el planejament i disseny de la ciutat”* (Magrinyà, 2008: 91).

His TCC (1859) consists of an ‘analytic part’ and a ‘synthetic part’, where in the former he made a thorough analysis of Barcelona’s existing situation built environment and social issues—<sup>42</sup> and acted a basis for his reform and expansion project discussed in the latter.

Focusing on hygiene and public spaces, in his TCC in 1859, Cerdà wrote about the importance of air, ventilation, sunlight, water, streets, squares, gardens, and trees for a better quality of life. In his analysis on the conditions of the walled town, he described the same problems and issues as Monlau’s that, in fact, all industrial cities at that time were facing (Torres, Llobet, Puig, 1985).

Cerdà wrote that what affects the purity of air are; the narrow and tortuous streets that do not leave a sufficient space for circulation; the absence of spacious gardens and squares that help in refreshing the atmosphere; the excessive height<sup>43</sup> and narrow patios of buildings that blocks sunlight from entering; lack of potable water, drainage, adequate toilets and sewage system; disregard for public and personal hygiene; the presence of intramural cemeteries, hospitals, prisons, slaughterhouses, fisheries, etc.; and the multitude of factories, workshops, and storage houses emitting toxic gases, carbon and miasmas all contributing to air pollution and high mortality, and threatening public health. He argued that air, light, water, and space are an important source of life and science establishes that the minimum amount of space and air per person is 6 to 10 m<sup>2</sup> but society had reduced it to 3.60 m<sup>2</sup> for the upper class and 1.17 to 0.90 m<sup>2</sup> for the lower class.

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<sup>42</sup> Cerdà described and analyzed the city in details from its geographical position, location, surroundings, climate, sun-light, air circulation, water, hygiene and mortality rates to housing types and dimensions, streets, subterranean levels, nature, gardens, social problems, poverty, and workers’ conditions and salaries.

<sup>43</sup> Many streets varied from 3.2m to 1.5m wide formed by 19m high buildings (Cerdà, 1855).

Poblaciones	Por cada 100 individuos mueren al año
Barcelona.....	2'8570
Paris .....	2'7027
Philadelphia .....	2'5511
Charleston.....	2'5793
Francia (su conjunto).....	2'5640
Boston.....	2'4572
Baltimore.....	2'4917
En las 86 ciudades reunidas de Bélgica ..	2'4573
Bélgica (su conjunto).....	2'0970
Lowell .....	2'1194
En las poblaciones rurales de Bélgica.....	1'9907
Londres.....	1'6700

The mortality rates in Barcelona are 0'10 higher than Paris; 0'30 higher than Philadelphia and Charleston; 0'40 than Boston, Baltimore and the 86 cities of Belgium; 0'70 than Lowell and Belgium; 0'80 higher than rural Belgium; and almost the double of the rate of London.

Fig. 29 Barcelona's mortality rates compared to other cities. For every 100 individuals Cerdà gives the number of deaths in every city per year (Cerdà, 1859).

	Superficie en hectáreas	Número de habitantes	Población específica por hect.	Superficie que corresponde a cada habitante en metros
Barcelona .....	202,37	149.905	741	13,50
Barceloneta .....	24	12.738	531	18,86
Londres .....	21.000	1.924.000	91	109,14
Londres (la Cité) .....	259	125.000	483	20,72
Paris .....	3.438	1.053.897	306	32,62
Madrid (la parte edificada) .....	493,3	206.507	419	23,89
Madrid (todo lo cercado) .....	780,2	206.507	265	37,78
Filadelfia .....	685,87	220.000	321	31,18
La Habana .....	398	138.000	347	28,84
Santiago de Cuba .....	115,2	24.000	208	48,00
Matanzas .....	165,3	20.000	121	82,65
Palma de Mallorca .....	111,5	40.480	363	27,54
Valladolid .....	154	28.000	182	54,95
Segovia .....	116,6	12.000	103	97,08

Fig. 30 Cerdà compares Barcelona to different cities concerning its area in hectares; number of inhabitants; specific population in hectares; and the area corresponding to each inhabitant in meters. The minimum area per person should be 40 meters according to science, so this gives an idea of the living conditions in Barcelona that allows 13.50 meters per person (Cerdà, 1855).

Cerdà considered streets as air canals and the wider they are the better health, light and ventilation they provide. Their width varies according to the type of climate, necessity of circulation and public health, and their proximity to public buildings or certain places. But in cities with mild climate streets should be between 50 to 60 feet, minimum, bordered by 3 to 4 storey buildings.

Squares and open spaces are indispensable and were scarce in the city, as Cerdà pointed out:

*“La longitud total de las plazas de Barcelona es de 2.580’58, su anchura màcsima de 83’65, la mínima de 3’32 y la media de 23’25, siendo la superficie total de 59.074’20 metros; y la de la Barceloneta tiene un desarrollo de 108’23, siendo su anchura màcsima de 47’38, la mínima de 36’27, la media de 41’83 y la superficie total de 4.668’75 metros” (Cerdà, 1859: 139).*

All these factors made Barcelona a contradictory city, as Busquets (2005) specified, suffering on one hand from asphyxiation on all levels, and on the other hand had a quite growing economy and new projects of public spaces like Pla de Palau (1825) and the buildings’ façades surrounding it, Plaça de Sant Jaume (1820-1823), and Fransesc Daniel Molina’s Plaça Reial (1848-1859) and Plaça Duque de Medinaceli (1851).

*“Tocante a plazas, sobre ser pocas en número y no hallarse convenientemente distribuidas en toda la superficie de la ciudad, por sus dimensiones exiguas no merecen otra calificación ni más importancia que la que daríamos al jardín general de una manzana ó al patio de una casa particular. Por lo demás sus acometimientos con las calles que a ellas confluyen no tienen ninguna de las condiciones que se deben al aseo salubridad y comodidad. Merecen sin embargo mencionarse, como plazas de crucero la de Palacio y la de la Constitución y como depósitos de aire la Real y la del Duque de Medinaceli” (Cerdà, 1859: 139).*

## The Eixample

Cerdà carefully took into consideration his analyses and statistics and drafted a plan tackling Barcelona’s basic problems while creating an urban layout with balanced urban functions and addressing mobility and connectivity all of which influenced the city’s contemporary setting (Nicolau, Fuster, Venteo, 2001).

He thoroughly studied the natural disposition and orientation of the new streets in order to create the best connection between the city and its surroundings.

This was based on four criteria:

*“1º con respeto a la dirección de los vientos más saludables que acostumbran reinar por más tiempo en la localidad, 2º relativamente a la dirección del movimiento de importación y de exportación establecido a que pueda establecerse en lo sucesivo, 3º por lo tocante a la suavidad a aspereza de las pendientes que deben resultar y 4º por lo que se refiere al fácil y conveniente desagüe de la alcantarilladas” (Cerdà, 1859: 374).*

Cerdà found that the adequate orientation of the new Eixample is NE to SW and NW to SE in an orthogonal grid layout of equal repeating elements on 880 hectares of land covering the entire Barcelona Plain. The layout consisted of a system of 550 blocks or intervias in between streets or vias of 20 to 50 meters wide<sup>44</sup>. The building blocks were of

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<sup>44</sup> He paid great attention to the design of the streets since he witnessed the difficulties that the narrow streets in the old city caused, not only for carriages and pedestrians, but also for air circulation. For this reason, to create a highly efficient system, connection and circulation, he suggested three types of street widths; common

16 meters high, four storey blocks of 113.3 meters and covered 12,370 square meters of land oriented at 45° angles from the north, repeating the Roman layout (Cerdà, 1859; Bohigas, 1963).

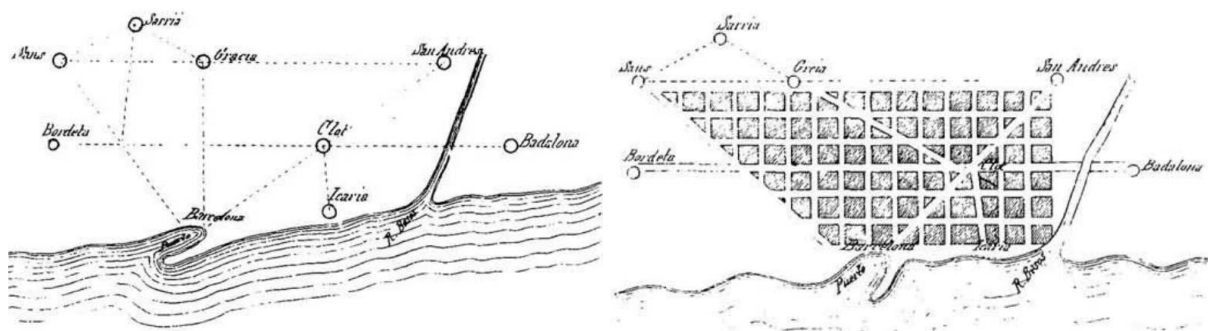
In his grouping of blocks Cerdà was seeking equilibrium, social harmony, and a fair distribution under a general plan. The right size and shape of the blocks is vital in order to prevent an outcome similar to Barceloneta where the blocks are of two small rows stuck together leaving almost no room for open spaces, ventilation and light (Cerdà, 1859).

*“Es pues un problema de la más alta importancia en higiene, economía y administración municipal el determinar, 1o la forma de las manzanas, por lo que toca a la salubridad del vecindario; 2o la relación que hayan de tener los lados que los limitan, por lo que hace referencia al a viabilidad; y 3o la longitud o desarrollo absoluto de todos estos lados por lo que respecta a la economía y buena administración”* (Cerdà, 1859: 411).

Their most characteristic feature is their chamfered corners or ‘chaflanes’. Cerdà studied the train circulation in Paris and the rotations it needed at the crossroads. On this basis, he found that the best solution is to chamfer the corners 20 meters to ensure on every intersection more fluid traffic in all directions and to provide small and visible squares.

*“Cerdà define la esquina como el punto de relaciones y, por lo tanto, de actividades. El Eixample es una sucesión de tramos de calles y de plazas que se forman en los cruces. Como consecuencia, observamos que en los chaflanes se sitúa una gran diversidad de elementos de mobiliario: quioscos de prensa, anunciadores y puntos informativos, monumentos, urinarios, fuentes, bancos, etc., que se han ido acumulando a lo largo de 150 anos”* (Magrinyà, Marzá, 2009: 122).

*“Es decir, que esas plazoletas y plazas se forman con lo que se merma á las esquinas de los intervías por medio de un achaflanamiento que sin gran perjuicio de los intereses intervíarios, tal vez con ventaja de los mismos, deja satisfechas las exigencias y necesidades de la vialidad”* (Cerdà, 1867: 737).



**Fig. 31** Sketches of the layout of Cerdà's Eixample covering the whole Barcelona Plain and connecting all neighboring municipalities (Cerdà, 1859).

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type of 20 meters; 35 meters; 50 meters such as the high-speed main connectors like Gran Via de Les Corts Catalanes, Av. Diagonal, Av. Parallel and Av. Meridiana.

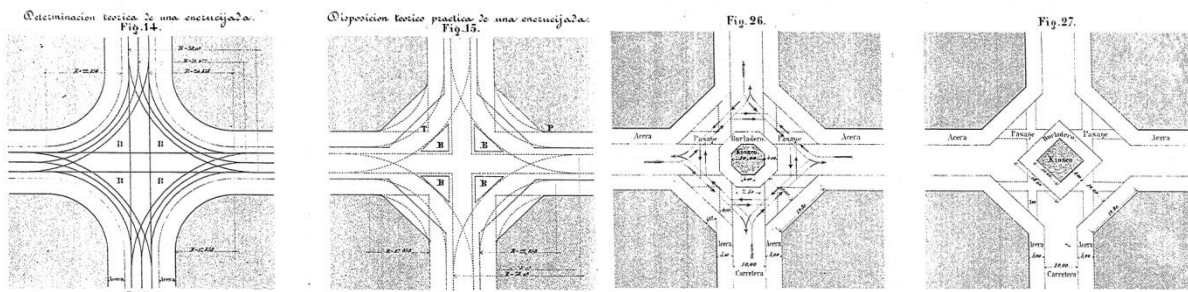


Fig. 32 Plans of various options of organizing pedestrian crossings and vehicle movements (Cerdà, 1863-11).

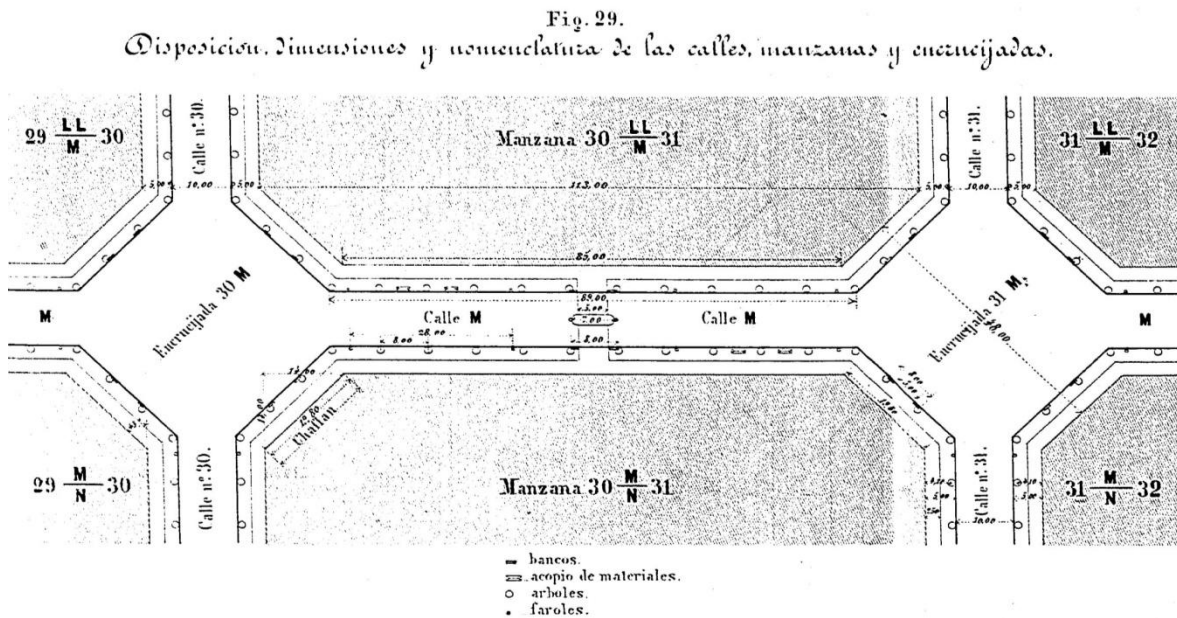


Fig. 33 Plan of the chamfered corners and study of the dimensions of street blocks, streets, junctions, and placement of materials, benches, street lights and trees (Cerdà, 1863-11).

## Squares and Gardens

The 19th Century hygienist movement with its concern for urban hygiene and salubrity, insisted on the importance of creating urban gardens, squares, parks, and sidewalks and emphasized on planting them with green areas and trees (Capel, 2002) and this matter is reflected in Cerdà's epigraph in TGU (1867) "*rurizad lo urbano: urbanizad lo rural*" (Ruralize the urban: urbanize the rural).

Cerdà stressed on the importance of planting the streets with trees to add more salubrity and aid in humidity. As an ideal proportion, they should be planted in streets of 25 to 30 meters wide and trimmed up to 7 to 8 meters high leaving between them and the façades

an interval of 10 meters thereby they can spread without damaging the sewage system or the buildings' foundations. *"Las plantaciones de árboles son [...] el medio más eficaz de prevenir la infección del suelo, de sanear el terreno y hasta de purificar la atmosfera"* (Cerdà, 1859: 382).

As for streetlights lanterns should be converted into gas and standardized in all streets, squares, gardens, and pathways. To prevent dark areas, the distance between them should not exceed 25 meters and to be adequately placed in ventilated spaces as opposed to narrow and enclosed ones for fear of intoxication, heating and fire.

To Cerdà squares and gardens were essential and considered them as:

- places of rest: Streets are spaces of motion to travel from one place to another with no resting points for fear of obstructing circulation, unforeseen accidents or causing discomfort to others. Therefore, just like stair landings, squares and gardens serve as resting places while moving around the city. *"[...] las plazuelas, las plazas, etc. que debemos considerarlas para la circulación a piso llano como los descansillos o rellanos al subir una escalera"* (Cerdà, 1859: 384).

- places for commerce, business and gatherings: Squares are very important spaces for trade, shops and public markets, for this reason they should exist extensively in all cities and heavily frequented businesses should only be established in them. *"Las plazas debieran hallarse con profusión en todas las ciudades porque en ellas y solo en ellas debieran establecerse las tiendas que por su comercio se hallan muy frecuentadas"* (Cerdà 1859: 384). He argued that *"No hay plazas ni squares que den el espacio y la salubridad que necesitan los puntos donde la población o los intereses mercantiles se hallan mas condensadas. Si alguna calle o plaza cumple con estas condiciones puede desde luego asegurarse que es por mera casualidad, pero no porque se hiciera al intento y por efecto de una sabia previsión"* (Cerdà, 1859: 404).

- spaces of circulation, health and pleasant distractions. They are regarded as vast deposits of air that significantly contribute to the circulation of streets and buildings. They decrease population density by providing and increasing the relative extent of open spaces between buildings. They should contain trees and greenery, gas streetlights, benches, decent public fountains and urinals arranged in specific places, and an area intended for parking light carriages. *"Disminuyen la densidad de la población aumentando la extensión relativa del espacio ocupado por cierto número de casas: puede y deben mirarse como vastos depósitos de aire que contribuyen poderosamente a la circulación del de las calles y del de las habitaciones."* As a synthesis, *"en cada calle debería haber una plazuela, en cada barrio una plaza, en cada cuartel un jardín"* (Cerdà, 1859: 384)

He summarized by pointing out that

*"[...] las ciudades no deben carecer de plazuelas para el descanso momentáneo de la gente que esté fatigada ó se tenga que aguardar, plazas para poderse reunir un número suficiente de individuos à tratar de sus negocios particulares, jardines donde poder encontrar salud y*



*agradable distracción, plazas ó mercados públicos donde poder hacer todo género de acopios bien sea de los artículos de primera necesidad y de uso domestico, ya también para la compra de los que puedan ser de puro lujo, y deben tener también comunes y orinales públicos decente y cómodamente arreglados en sitios destinados al efecto” (Cerdà, 1859: 384).*

	<b>Uso dominante</b>	<b>Usos complementarios</b>	<b>Diseño</b>	<b>Equipamiento</b>
<b>Vía</b>	<i>Desplazamiento productivo de seres y mercancías</i>	<i>Encuentro Descanso</i>	<i>Según sección transversal (1:2:1) que incluye el diseño de subsuelo y según sección longitudinal que confiere una imagen de conjunto</i>	<i>Pavimento Árboles Iluminación Bancos Fuentes de boca Relojes eléctricos Placas de nombre de las calles y de numeración de las casas Otros</i>
<b>Plazas</b>	<i>Reposo</i>	<i>Encuentro Juego</i>	<i>Derivadas de la trama antigua de la ciudad o de un ensanchamiento de la vía (Chaflanes)</i>	<i>Los anteriores Kioscos Abrevaderos Esculturas</i>
<b>Plazuela</b>	<i>Reposo Esparcimiento</i>	<i>Encuentro</i>	<i>Segregada de la vía en la trama antigua</i>	<i>Los anteriores</i>
<b>Jardines-squares</b>	<i>Reposo Esparcimiento</i>	<i>Encuentro Juego</i>	<i>Segregada de la vía</i>	<i>Los anteriores más Plantaciones de flores Fuentes ornamentales</i>
<b>Paseos públicos</b>	<i>Paseo Esparcimiento</i>	<i>Encuentro Circulación-paseo</i>	<i>Segregada de la vía</i>	<i>Los anteriores</i>
<b>Parque</b>	<i>Reposo Esparcimiento</i>	<i>Encuentro Juego</i>	<i>Segregada de la vía como agrupación de varias manzanas</i>	<i>Los anteriores</i>
<b>Bosque</b>	<i>Reposo Esparcimiento</i>	<i>Encuentro Juego Diversión Deporte”</i>	<i>Segregado de la trama del conjunto de la ciudad y comunicado por transporte</i>	<i>Elementos de soporte a acciones de tipo gastronómico, deportivo, recreativo en general</i>

**Fig. 34** The following table summarizes Cerdà’s perspective regarding public spaces. It is compiled by Antoni Remesar based on the works of Cerdà (Remesar, Ricart, 2013-03-25).

Based on those ideas, Cerdà stressed that every household should have a special garden and for every group of houses a common square with a direct access for the ground floors via hallways and for upper floors via stairways. For this reason, when the juxtaposition of several buildings form a block or an island, the combination of each household’s garden leaves an empty space in the center of the island:

*“Cuando la reunion de varias casas juxta-puestas viene a cerrar una manzana o isla, el conjunto de los jardines de todas las casas deja en el centro de la isla un espacio sin edificar, que para los efectos de la luz y de la ventilación, esta con todas las casas la manzana en la*

*misma relación que el patio de una casa particular tiene con las habitaciones que le son contiguas” (Cerdà, 1855: 78)*

In other words:

*“...de la misma manera que cada casa ha de tener su jardín especial, cada manzana o grupo de casas tenga para el uso y servicio particular de todo el grupo, una gran plaza o s’quare en el centro de la manzana” (Cerdà, 1859: 412).*

Hence, instead of closing the islands or blocks, he gave them three forms: ‘U’, ‘L’ and parallel shaped for the purpose of leaving at least 50% of the blocks for courtyards, gardens, and squares that serve as public spaces. He proposed the depths of the buildings to be between 20 to 24 meters with a height of 16 to 20 meters leaving the rest of the block to open spaces.

*“Más si en vez de cerrar las islas se dejan abiertas en forma de |\_| y que los jardines de cada casa den frente con un enverjado a las calles opuestas y paralelas, entonces la renovación del aire de los jardines se hará mucho mejor, no tendrá ya el carácter de aire estancado, será mucho más saludable, las habitaciones que se hallen en contacto inmediato con él, serán muchísimo más saludables, y la circulación publica por las calles no será ni tan insalubre ni tan monótona como en el día” (Cerdà, 1859: 351).*

Their minimum width should be equal to the maximum height of the buildings surrounding them. “[...] *la superficie mínima destinada a jardín podrá representarse por un cuadrado cuyo lado será la raíz cúbica del producto de la longitud por el fondo y por la altura de la casa o casas antiguas” (Cerdà, 1859: 351).*

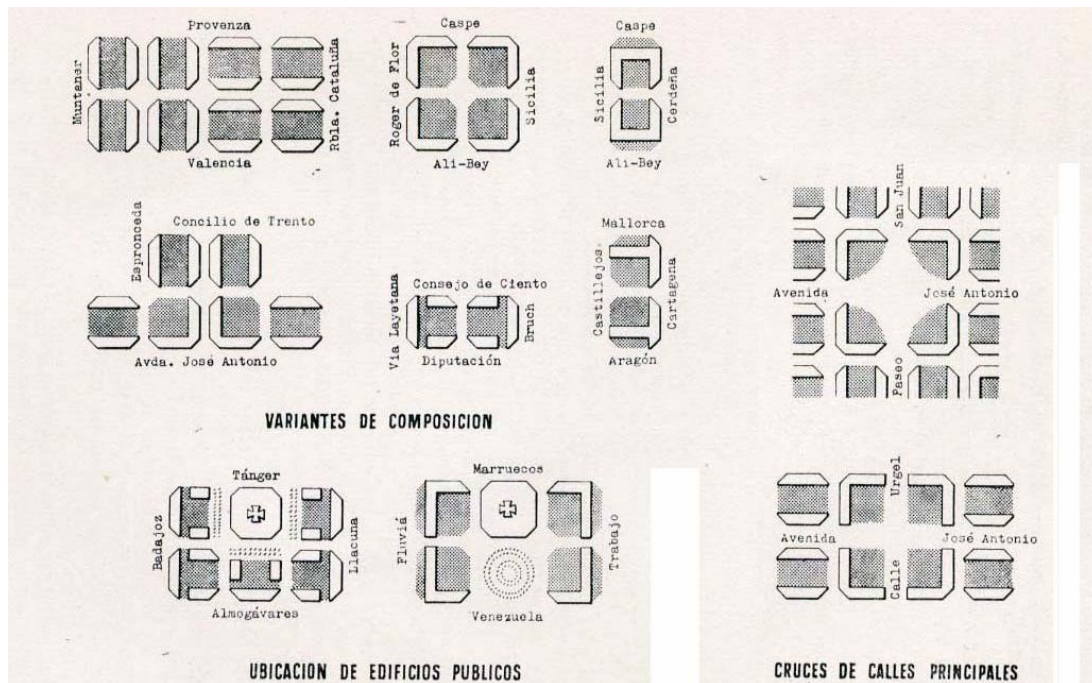
This lowers density, provides all the households with light and ventilation, and avoids the inconvenience and danger, especially for children and the elderly, of going up to the housetops or going out on the streets in search of public squares and gardens for strolling, playing, sunbathing or getting some fresh air. For this reason in his TGU Cerdà defined them as “*pequeña urbe*” a small city that function on its own and connected to the outside through the different vias.

*“[...] en cada uno de esos espacios aislados por las vías urbanas existe un pequeño mundo, una pequeña urbe, o urbe elemental, si se quiere, que en su conjunto y en sus detalles conserva la más admirable analogía y hasta semejanza con la grande urbe que, todo bien mirado, no es más que un conjunto armónicamente compuesto de tales urbes elementales, enlazadas entre sí por el gran sistema viario urbano” (Cerdà, 1867: 363, 364).*

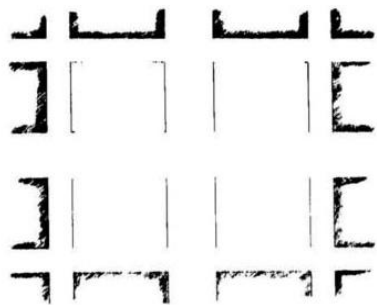
In addition to that, he created the large-scale Plaça de les Glories Catalanes as the future center of the city and planned 8 public parks to be distributed across the city’s surface including Montjuïc and Parc de la Catalana in the Besòs area (Bohigas, 1963).

There were also exceptions in the treatment and layout of markets, schools, religious, public and monumental buildings were in some cases they occupied a whole block like San Antoni market; Sagrada Família with Plaça de Gaudí and Plaça de la Sagrada Família on both façades each occupying a whole block to further emphasize the temple; and in

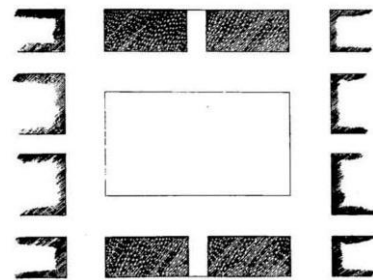
Finally this provision, harmonizes all the conditions of health, morality and comfort that was lacking in the city and brings the city closer to nature and to Cerdà's goal of ruralizing the city.



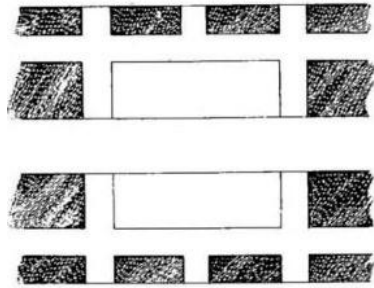
**Fig. 35** Cerda's different compositions concerning blocks, public buildings and intersections (Bordoy, 1959)



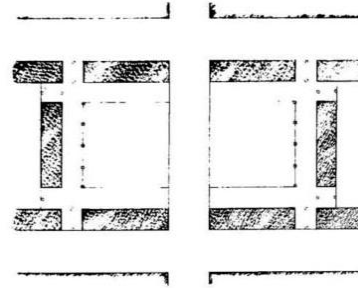
Rectangular square with one crossing for carriages, with porticos on its two extrimities and gardens adjacent to them.



Square with two crossings for carriages,  
with gardens or market in the center and no  
porticos.

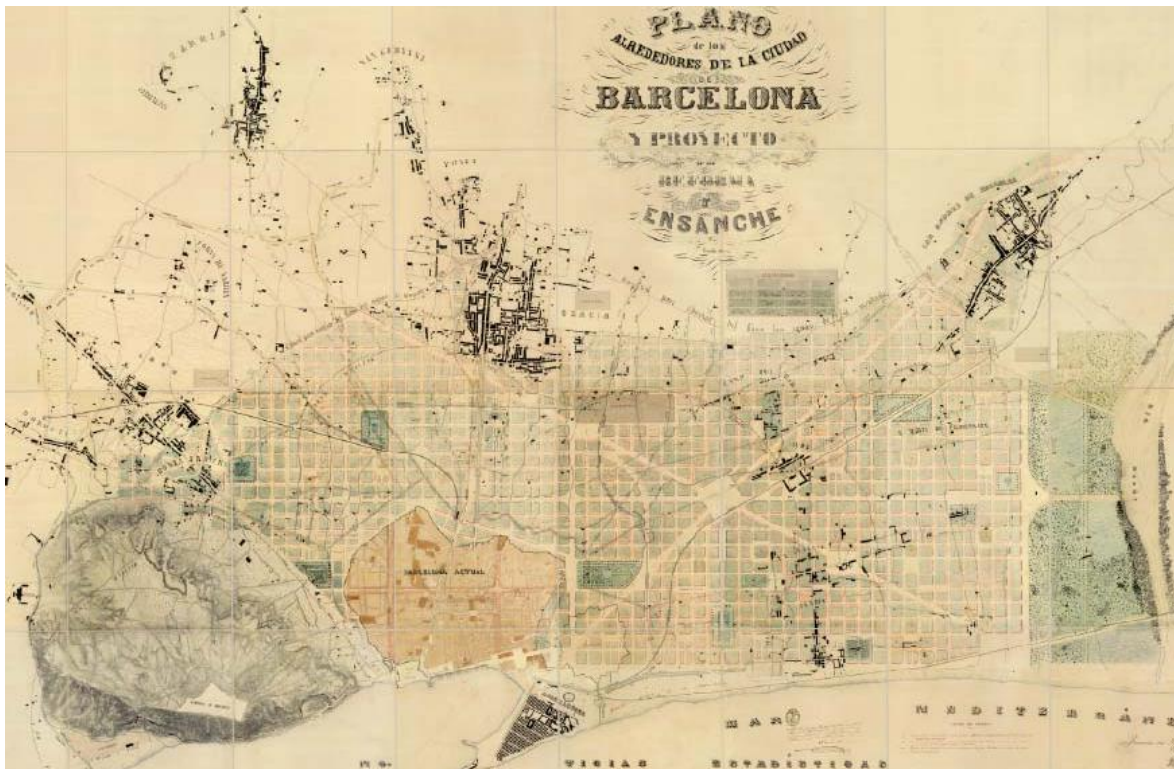


Rectangular square with one longitudinal crossing for carriages, with porticos on its major sides and gardens adjacent to them.



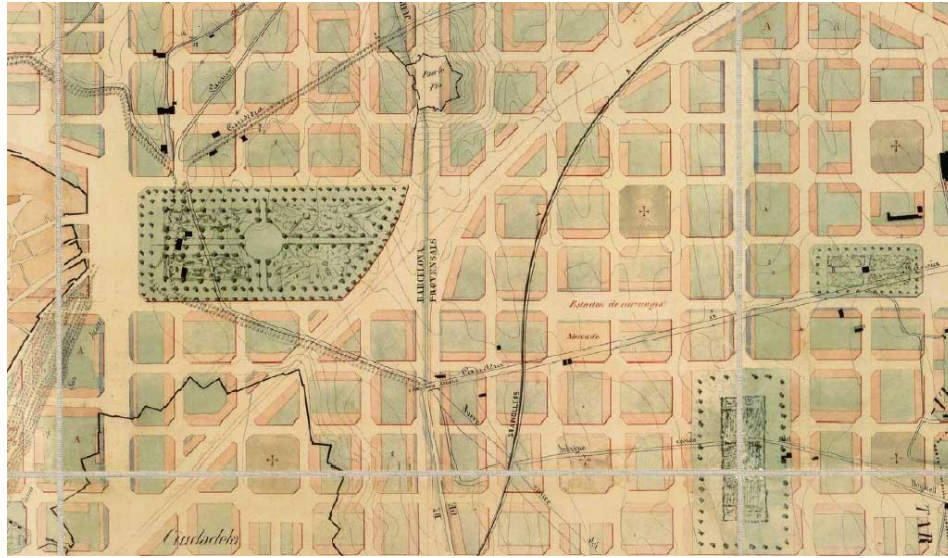
Square with two lanes for carriages that cross in the middle and four gardens.

**Fig. 36** Different layouts of squares in relation to the blocks and streets (Cerdà, 1859).



**Fig. 37** Fascimile of Cerdà's plan showing the green interior courtyards and proposed green parks (1859. AHCB)





**Fig. 38** Zoom in on the blocks with the open green interior courtyards with their 'L' shape or 'I\_I' shape and few of the proposed parks (1859. AHCB)

### Cerdà and the sewage system

In his TCC, Cerdà developed a number of general considerations to plan a city's sewerage system which he considered as the principle project of public utility and the main determinant of a population's health and sanitary conditions.

*"El sistema de alcantarillas es en todos los casos el que decide principalmente de las condiciones de salubridad de una población o de los diversos barrios y calles que la componen, en términos de poderse asegurar que las enfermedades y las defunciones anuales son siempre mucho mayores en número en los barrios en que no hay alcantarillas o que las tienen mal construidas. Así las alcantarillas deben considerarse como la primera obra de utilidad pública de toda población. Es tal la importancia que en todas las poblaciones civilizadas se da a esta clase de obras subterráneas que la ciudad de Londres conserva el plano de todas ellas en una sala abovedada y con todas las precauciones necesarias para que no se destruya en el caso de incendio"* (Cerdà, 1859: 389).

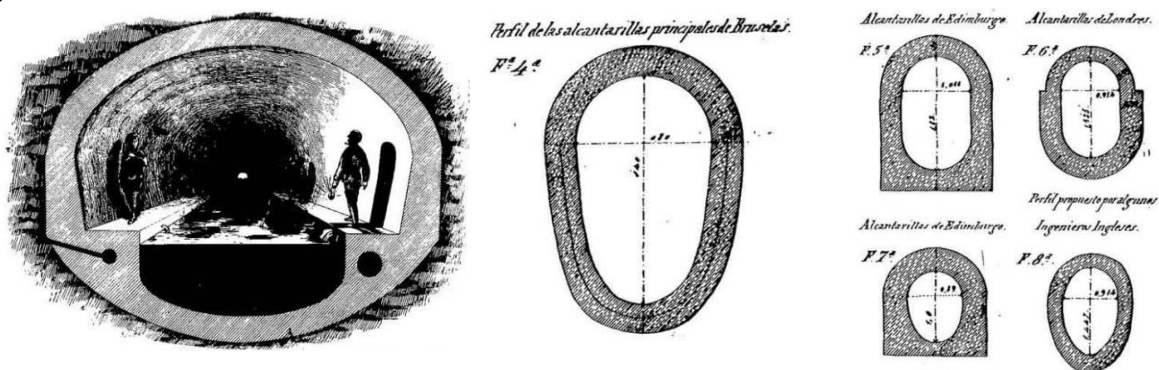
Among the urban services, Cerdà treated the sewage system in more details and focused on the water drainage channels and the pretreatment of rainwater (Magrinyà, 1995). He analyzed the poor situation of Barcelona's sewerage system in Barcelona pointing out that water drainage channels passed through the center of the streets and the general sewers ran at very shallow depths with no order nor system of construction. The sewage pipes were ineffective due to their small size that varied between 0.39 and 0.58 to 0.78 meters of height.

Moreover, he specified the different circumstances that determine the number, position, inclination, and dimension of the sewers such as: the land topography; difference in altitudes in relation to sea and river levels; the disposition of filtering and impermeable

layers; the maximum amount of water per unit of time in days of downpours; the direction of streets with respect to circulation; and the position of houses that border them.

He gave examples Paris and Brussels's sewage system which he knew well from his travels to these cities and he was also familiar with Chadwick's revolutionary sanitation treatment in London. However, as Magrinyà (1995) pointed out, he was more influenced by the French model characterized in the following principles:

1) Human waste should be kept in-house until the moment of emptying them, and 2) materials extracted from septic tanks should be used in agriculture as fertilizers. These criteria predominated the system in France until Haussmann's "tout-à-l'égout" criteria was sanctioned with the 10th of July 1894 law and became the only procedure considered for capital's sanitation (Dupuy, Knaebel, 1982).



**Fig. 39** Cerdà showing examples of sewer galleries from Paris, Brussels and Edinburgh. The first sketch published in *Le Monde Illustré* (1858) showing the gallery under Paris's Boulevard Sebastopol that Cerdà had the chance to visit during its construction in September 1858 (Cerdà, 1859).

Cerdà argued that it is important that such sewers to be planned thoroughly and not become a lair of filth endangering the population's health as in the case of Barcelona.

*"Se necesita que esta sea muy esmerada para que las tales alcantarillas no se conviertan en unas verdaderas letrinas en donde las inmundicias se estancan, se acumulan y endurecen entreteniendo la población en un estado permanente de infección como sucede in Barcelona"* (Cerdà, 1859: 390).

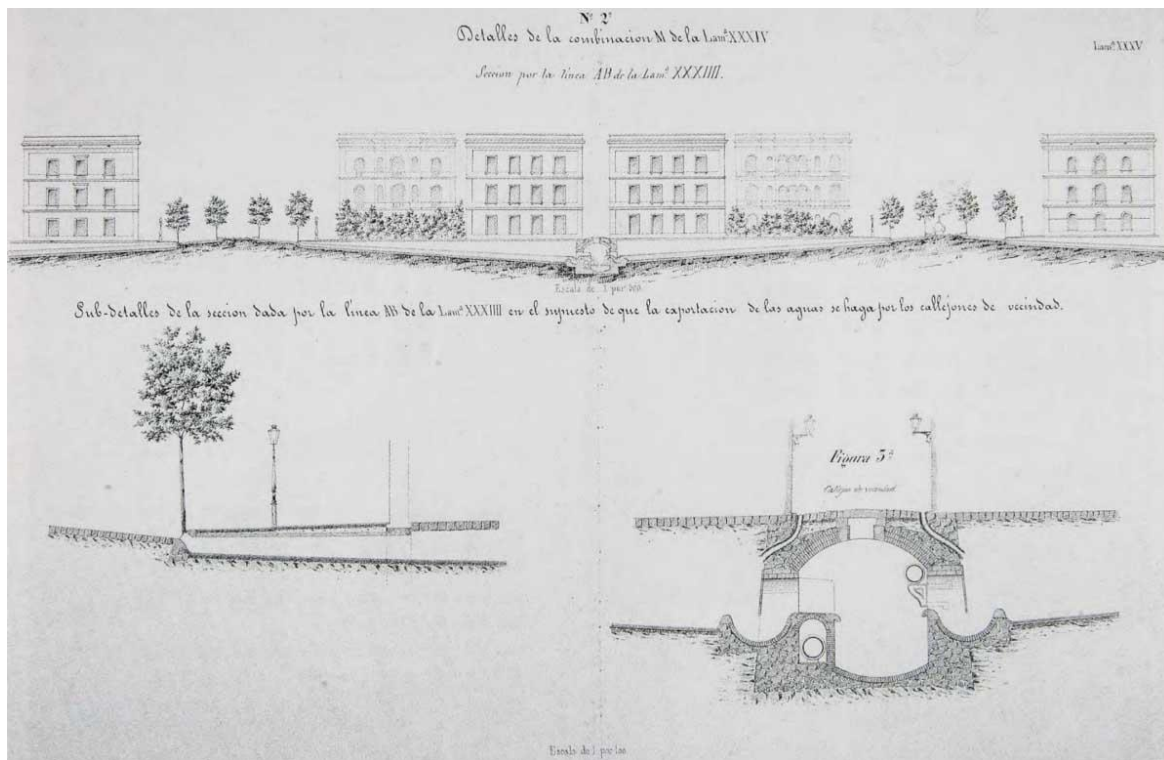
Although Cerdà's sanitation proposals were never built, they influenced the Ensanche's construction and urbanization and subsequently became the basis of Pere Garcia Fària's<sup>45</sup> sanitation and sewage project (1886) (1891) (Tarragó i Cid, 1974).

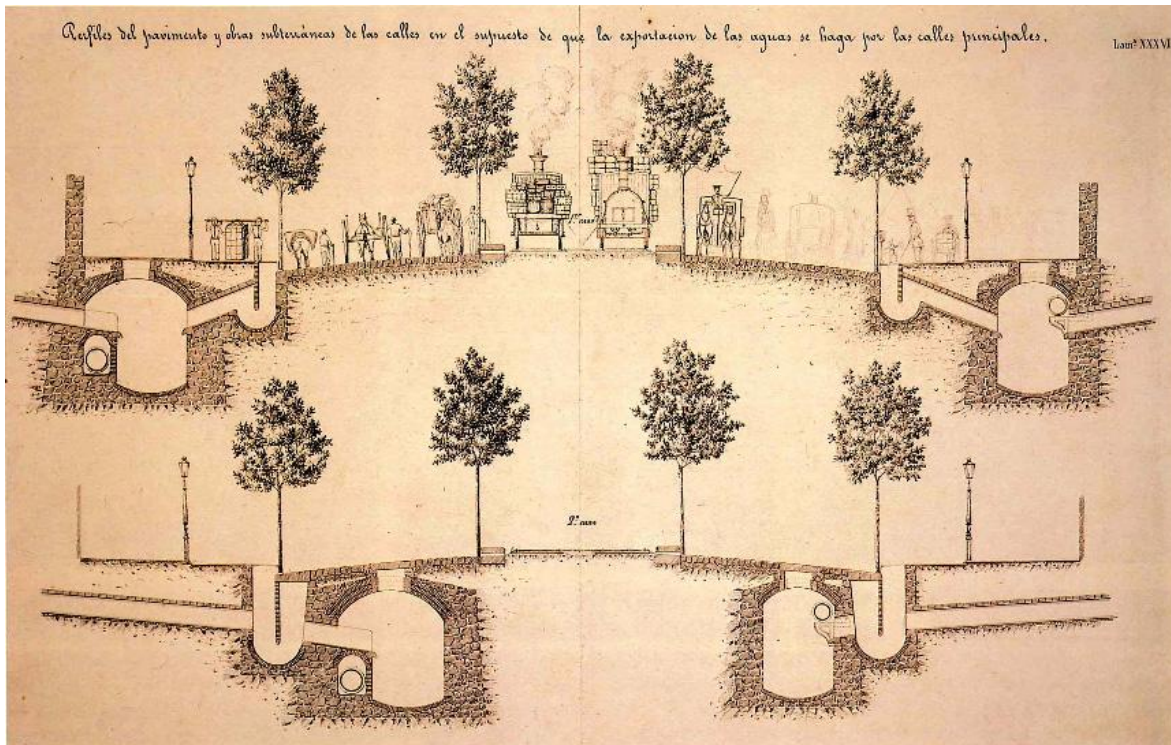
*"Cerdà, que estudió filosóficamente los problemas de urbanización, no podía olvidar los de saneamiento, a los cuales concedió la trascendencia que merecen, siendo debidas a él las primeras galerías con solera circular. En las calles ordinarias del Ensanche, proponía la*

<sup>45</sup> Pere Garcia Fària architect and civil engineer, chief engineer of the City Council's Sewerage and Sanitation and chairman of Barcelona's l'Ateneu Natural Sciences section. He is responsible for the 'Proyecto de saneamiento del subsuelo de Barcelona' (1891) as well as many other sanitation and sewerage projects in many other cities like Madrid, Murcia, and Cartagena.



construcción de una alcantarilla con bóveda y solera semicircular de 1,00 m de amplitud por 1,80 m de altura. En las calles de ronda proyectó la cloaca de forma elíptica, que más tarde construyó el Arquitecto señor Serrallach y que es una de las galerías mejores que en Barcelona existen; resultando que en las secciones de alcantarillado propuestas por Cerdà se adoptaba el mismo criterio consignado en el dictamen previo que redactamos en 1885, de que todas las galerías fueran capaces para permitir la entrada del hombre y se suprimieran en ellas los ángulos y las superficies horizontales, en las que se depositaban fácilmente las materias orgánicas, siendo de lamentar que por causas injustificadas cayeran en lastimoso abandono las ideas sustentadas por el sabio urbanizador de la Barcelona moderna, que debieron haberse desarrollado en la forma verdaderamente magistral en que él las proponía, pues así se hubiera conseguido obtener con gran economía una urbe modelo" (García Fària, 1891: 226 In Magrinyà, 1995).





**Fig. 40** A sample of Cerdà's overall street section showing blocks, road, sidewalks, trees, lighting, furniture, pavement, and underground drainage and channels (Cerdà, 1855).

### Sanitation Project of Garcia Fària

Despite the modern urban projects and epidemics it was from the second half of the 19<sup>th</sup> century that water and sewage networks were developed in a generalized form as Gómez Ordóñez stated:

*"Specifically, the construction of qualitatively new water supply services and of sewers in London, a pioneer city, did not take place until 1856 (the Bazalgette and Binnie projects). In 1860 Lindley carried out his plan for Hamburg and Frankfurt; the Paris Works began in 1865 under the direction of Belgrand; Van Mierle and Putzeis worked in Brussels in 1866; Hobrecht undertook the sanitation of Stettin and Berlín in 1873; Bateman, Person and Higgin did likewise in Buenos Aires in 1875; in Viena, Berger (1877); in Roma, Canevari (1879); in Lisbon, the Castel Branco Project (1880), etc." (Gómez Ordóñez, 1992: 382).*

Likewise in Spain, it wasn't until the 1880s that major sanitary projects were developed.

*"In around 1880, Spain saw the start of a cultural and legislative trend that centered on sanitary conditions in its towns and cities. The major sanitary services projects in Spain were developed as of this date (Solà-Morales M., 2010: 41), [and] after the initial phase of layout design (1860-1880), the study of urban utilities (particularly sewerage and running water) was the area where most progress was made" (Solà-Morales M., 2010: 43).*

In Barcelona, the healthiness of piped water and sewers was still a pending issue and was later introduced as an attribute of the new urban order (Solà-Morales M., 2010).

*“La política de saneamiento emprendida en aquellos momentos tiene dos dimensiones que vale la pena destacar. La primera se refiere a la relación entre alcantarillado, urbanización y calidad de vida; la otra a la vinculación del saneamiento físico y moral”* (Capel, Tatjer, 1991: 242).

The sewage system, of medieval and modern origin, did not grow at the expansion's same pace and the situation worsened as the 19th century progressed. In 1884, the City Council created a Commission under the charge of engineer Pere Garcia Fària to develop a study on Barcelona's existing health and hygiene situation and propose the necessary solutions. In his report published in that same year, 'Saneamiento de Barcelona. Condiciones higiénicas de la urbe: su mejoramiento'<sup>46</sup> (Sanitation of Barcelona. Improvement of urban hygienic conditions), Garcia Fària analyzed the situation, presented a series of statistical data, and proposed the need for a sewage system plan.

*“Para realizar las reformas bien y económicamente, debían acometerse los trabajos en grande escala y realizar de una vez todas las construcciones que afectan al suelo y al subsuelo, como el alcantarillado, el drenaje permeable y el pavimento con los accesorios correspondientes á cada una de estas obras”* (Garcia Fària, 1884: 42).

He gathered a number of statistical data showing the unhealthy conditions in Barcelona, whose mortality figures exceeded those of other European cities despite its good geographical position, gradient slope and mild climate. Following the 1885 cholera epidemic the City Council was forced to address urban sanitation and sewage system urgently.

In his article 'Saneamiento de las poblaciones' in the 'Revista de Obras Publicas', Garcia Fària writes, in more details, that the data from the 'Dirección de Beneficencia y Sanidad' monthly bulletin shows that among the 70 province capitals in Spain:

*“solo hay 10 cuya mortalidad se halle comprendida entre 24 y 30 por 1.000; 35 la poseen variable de 30 a 40 por 1.000; en 22 oscila entre 40 y 50 por 1.000, y las tres restantes poblaciones cuentan una mortalidad que alcanza la elevada relación de 52 a 53 por 1.000: mientras esto ocurre aquí, sabemos que en Londres, en 1885, según el Dr. Corfiel, medical officer of health de Saint Georges Square, ha tenido una mortalidad de 20'3 por 1.000; 28 grandes poblaciones de Inglaterra y Escocia la han contado de 21'6 por 1.000; Darlington, Barrow-in-Furness, Bourton-on-Trent, Hastings y Maidstone la han tenido menor de 16 por 1.000. Según el Dr. Simons, Weimar solo ha tenido 14'31 por 1.000; Chicago, 20'41; Baltimore, 20'79; Cleveland, 10'60; San Fransisco, 20'5; San Luis de Missouri, 21'3; New-*

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<sup>46</sup>Garcia Fària's report is also published in the magazine *Industria e Invenciones* year 1884 in issue numbers 10 to 21, 23, 26, and 28 to 41, under the title 'Condiciones Sanitarias de Barcelona. Su mejoramiento: disminucion de la mortalidad de sus habitants y aumento de la vida media de los mismos' found online in BNE's hemeroteca digital <http://hemerotecadigital.bne.es/results.vm?q=parent%3A0001451289&s=0&lang=en>

Haven, 20'4; Cristiania, 20'8, y Croydon solo 15 por cada 1.000 habitantes" (García Fària, 1886: 145).

He added that *"en Barcelona también observamos que durante la última epidemia, las calles estrechas, lóbregas y malsanas resultaron fuertemente castigadas, mientras las anchas y menos insalubres solo han sufrido débilmente. De las 18 calles en que la mortalidad por cólera excedió de 10 individuos, no hay una sola que pertenezca al ensanche..."* (1886: 148-149).

**Cuadro núm. 11.**  
*Relaciones entre la población existente y el número de fallecidos.*

PERÍODO.	PROMEDIO ANUAL.		Fallecidos por cada 1,000 habitantes.	OBSERVACIONES.
	Número de habitantes.	Fallecidos.		
1836-1838	133,541	3,675	27'52	Segun los datos publicados por el Sr. Colomer, la mortalidad por 1,000 habitantes era en 1861 de 28'2 varones, 23'2 hembras y 27'2 de ambos sexos. En 1877 estas cifras aumentan a 34'1 23'9 y 31'5 respectivamente. Segun los datos de la Direccion de Beneficencia y Sanidad, la mortalidad de ambos sexos desde 1879-1883 es de 32'50.
1839-1841	148,213	4,437	29'93	
1842-1844	154,083	4,844	31'43	
1845-1847	183,214	5,470	29'37	
1856-1858	183,787	5,336	29'03	
1859-1861	190,684	5,948	31'49	
1861-1880	249,106	7,492	31'50	

**Fig. 41** Table showing the relation between the population and mortality rates between 1830-1880 (García Fària, 1884-04-12)

**Cuadro núm. 29.**  
*Superficie viaria de Barcelona.*

	CALLES.				PLAZAS.				TOTAL GENERAL.	
	Número.	Longitud total.	Anchura media.	Superficie.	Número.	Longitud total.	Anchura media.	Superficie.	Longitud.	Superficie.
				Metros cuadrados.				Metros cuadrados.		Metros cuadrad.
Urbo. . . . .	440	49,845'50	6'50	321,008'90	24	1,243'50	42'70	53,091'10	51,089'00	377,100
Suburbio marítimo. .	46	11,385	7'16	81,519'50	2	107'00	54'89	5,873'00	11,492'00	87,392'50

**Fig. 42** Table showing Barcelona's surface and area of streets and squares in urban areas and maritime suburbs (García Fària, 1884-05-10)



Cuadro núm. 34.

*Cuántia y extensión de las varias clases de vías, superficie absoluta, que de cada una de ellas toca á cada habitante, y relaciones que las superficies de cada género de viabilidad guardan con la total del continente viario, así en la urbe matriz como en el suburbio marítimo.*

EN LA URBE MATRIZ.	Número de vías.	Longitud.	Extension métrica de las vías.		Toca por habitante una super- ficie.	RELACIONES que las varias superficies guar- dan con la total
			Anchura.	Superficie.		
Vías para la circulación pedestre, ecuestre y de carretillas de mano.						
Impasos. . . . .	30	937'50	3'44	2,948'60	0'017	0'0078
	1	39'00	31'00	1,209'00	0'007	0'0034
Pasajes pedestres. . . . .	14	1,322'00	3'81	5,040'50	0'030	0'0134
	1	84'00	56'00	4,704'00	0'028	0'0125
Vías para la circulación de carruajes ordinarios tirados por una sola caballería ó por dos uncidas ó pareadas.						
En una sola direccion. . . . .	94	13,104'00	3'87	50,715'30	0'303	0'1345
	5	156'00	13'90	2,169'00	0'013	0'0057
En direcciones encontradas. . . . .	289	30,191'00	5'42	163,734'75	0'978	0'4342
	32	1,704'30	22'67	38,644'40	0'230	0'1025
Vías para la circulación de toda clase de carrua- jes con tiros en reata.						
En direcciones encontradas. . . . .	13	3,245'50	21'21	85,078'45	0'508	0'2256
	3	305'70	74'77	22,859'00	0'136	0'0606
TOTALES. . . . .	482	51,089'00	7'38	377,100'00	2'250	1'0000

EN EL SUBURBIO MARÍTIMO.						
Vías para la circulación de carruajes ordinarios tirados por una sola caballería ó por dos, uncidas ó pareadas.						
En direcciones encontradas. . . . .	46	11,385'00	7'46	81,519'50	5'503	0'9328
	2	107'00	54'88	5,873'00	0'397	0'0672
TOTALES. . . . .	48	11,492'00	7'60	87,392'50	5'900	1'0000

Fig. 43 García Fària's statistics on the amount and area of different levels of roads and a comparison between the pedestrian and carriage circulations in the urban matrix and the maritime suburbs (García Fària, 1884-05-24)

The study led him to develop the first 'Proyecto de Saneamiento de Barcelona' (Barcelona's Sanitation Project) in 1886 during which time the City Council and Eugeni Serrano signed the agreement to develop the Universal Exposition that was to be held between September 1887 and April 1888 which, after Cerdà's expansion and the demolition of the Roman Walls, gave the city a chance to present itself internationally and to develop rapidly into an industrial center as Irigoyen (1990) pointed out.

In 1891, Garcia Fària drafted the definitive 'Proyecto de Saneamiento de Barcelona' – approved by the City Council on the 11th of June and published in 1893– and in the same year created the 'Instituto Municipal de Higiene' (Municipal Institute of Hygiene). At the same time, the new 'Ley de Ensanche' of 1892 (Eixample Bylaw) was sanctioned in order to legislate and establish the norms of the expansion, and the new 18 of March 1895 Bylaw 'Ley de Saneamiento y Reforma Interior de las Grandes Poblaciones' was sanctioned to remodel the old town.

*"La aprobación por el Ayuntamiento en 1891 y la publicación de la obra de Pedro Garcia Fària 'Proyecto de saneamiento del subsuelo de Barcelona. Alcantarillado, drenaje, residuos*

*urbanos' (1893) constituyen, sin duda, hitos decisivos en el tránsito a la Barcelona actual"* (Capel, Tatjer, 1991: 242).

After studying the sewage system of other cities and considering reports and treaties on medicine and hygiene such as Proust, Arnould and Fonsagrives, he drafted his project on a scale 1:5000 addressing thoroughly the issue of draining the Plain. His plan can be compared to major plan the likes of Durand-Claye and Persche, Wegmann, and Santo Crimp<sup>47</sup>, among others. He proposed a unitary plan that *"played for the city of Barcelona a major role as it became inserted in the framework of Ildefons Cerdà's extension plan of thirty years earlier... [and] analogously to Cerdà's [it] constitutes a technical elaboration which sustains in a highly exclusive way an urbanizing dynamic..."* (Gómez Ordóñez, 1992: 381). Garcia Fària's plan extended the existing 35 km network to 213 km of galleries with Carrer de les Corts, today Gran Via, the main axis for conduits or collectors. It supplied an underground network of collectors that evacuate waste with water supply –in other words from *"tout à l'égout"* that avoids water wells contamination– and provided the biological recycling of wastewater for agriculture purposes, as well as, cleaning and ventilating the sewage system (Irigoyen, 1990). The buildings no longer had to feature septic tanks and the sewer became a direct service (Gómez Ordóñez, 1992).

*"It was, then, a fundamental project for the city, and despite its fragmentary and drawn-out deployment, it laid the bases for the present-day functioning of the city's sewers. Garcia Fària made a detailed presentation of how the architecture and urban utilities should be approached as a whole, and his section drawings, according equal equal importance to the drawing of the houses and the services, are still exemplary today"* (Busquets, 2005: 182).

Conclusively, this new sewer system was a powerful mechanism for speculation and profit and the main drive for the urban development and construction of the Eixample and Barcelona's Plain (Capel, Tatjer, 1991).

Meanwhile, the old town was free from the enclosing walls but its reform was still pending and while European cities like Paris and Brussels were busy remodeling their centers, Barcelona was focusing more on creating the new city beyond the town walls.

*"According to the theory, this undertaking was to be combined with renewal of existing town or city, but for a period of time this second part of the equation was overlooked. The arguments in favour of the new city were to a large extent based on the unhealthy conditions of the old gothic and baroque city: overcrowding, the lack of ventilation and sunlight, the difficulty of removing waste and rubbish, and the insalubrity and shortage of housing in general"* (Solà-Morales M., 2010: 40, 41).

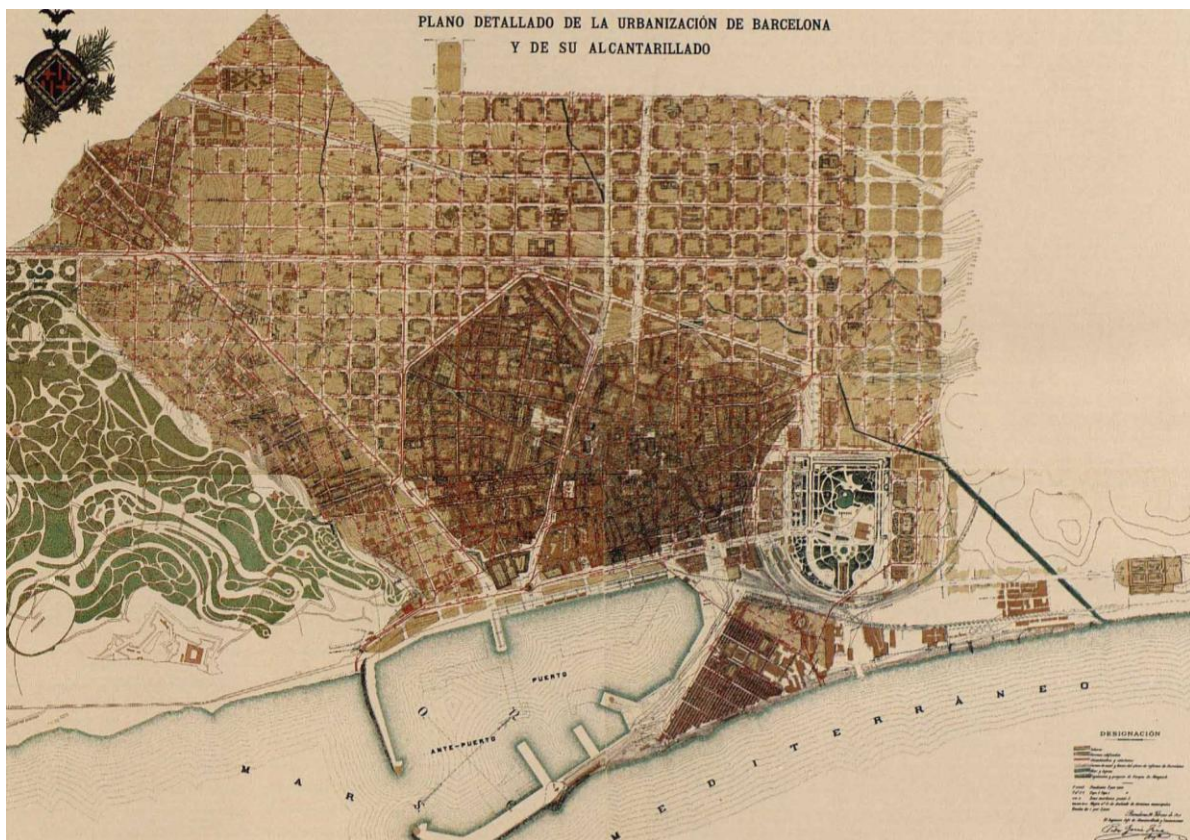
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<sup>47</sup> Durand-Claye and Persche's *Memoire sur l'assainissement de Berlin* (1886); Wegmann's *The water supply of the city of New York* (1896); Santo Crimp's *The main drainage of London* (1897).



However, while working on the ensanche, Cerdà did propose a special interior reform plan for Ciutat Vella suggesting the old town be connected and integrated into the new city via streets prolonged into it from the Eixample. And for this reason Garcia Fària argued that the sewage system and internal reform are highly related and he incorporated the sewers into the plan of the old town.<sup>48</sup> As Busquets quoted and translated Garcia Fària (1891: 236):

*“In Barcelona the question of sewerage system is intimately related to that of internal reform. The network of existing drains is defective in the extreme, particularly in the oldest districts, with their narrow, winding streets, and it should disappear altogether and be brought into line with the ones that are to be built in accordance with the directions and levels of the streets in the new project. Cleaning is impossible in this narrow, winding streets, since in some there is not even room for the cart that collects the rubbish that is thrown into the public highway, (...) making them a permanent focus of corruption”* (Busquets, 2005: 184).



**Fig. 44** García Fària's detailed plan of Barcelona's Sewage system (1893. Ayuntamiento de Barcelona, 1986)

<sup>48</sup> While Garcia Fària was working on his plan before its final approval in 1891, Baixeras Plan, which is based on Cerdà's interior reform plan, was approved in 1889 and Garcia Fària was trying to incorporate the sewers into the layout proposed by this plan. Which also brings us to the conclusion that he was in favor of these kinds of "percée" projects for Ciutat Vella.

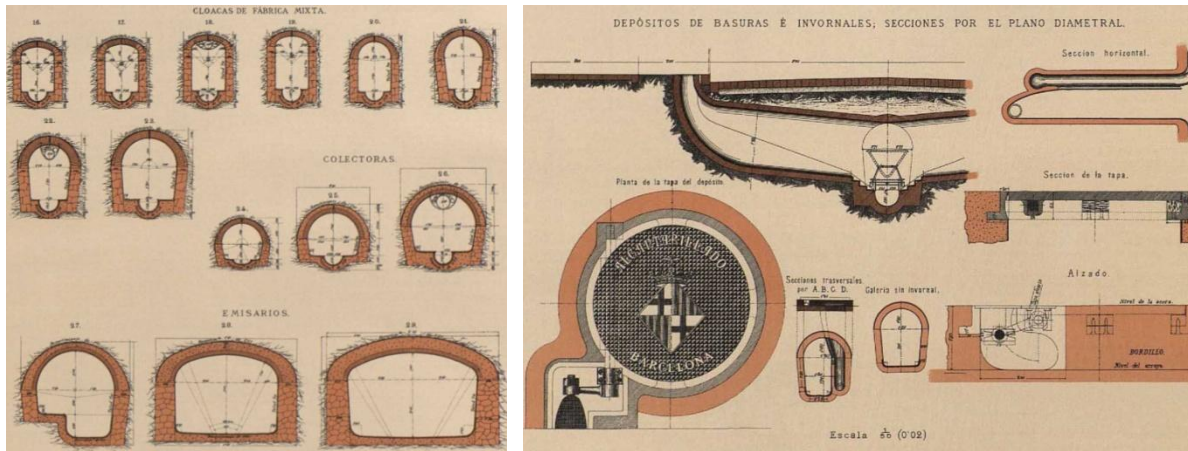


Fig. 45 Sections of sewage galleries and street drainages (Garcia Fària, 1893. Ayuntamiento de Barcelona, 1986)

## The Eixample Bylaw

To manage the expropriations, solve land occupation, height and depth of buildings, and regulate the development and of the Ensanche the 'Ley de Ensanche' of 1892 (Eixample Bylaw) and its 1893 Enabling Act was enacted and took care of managing and carrying out urban developments and expropriations not regulated by the earlier Acts of 1864 and 1876. This Act, which remained in force until the 1956 'Ley de Régimen del suelo y Ordenación Urbana', regulated both of Madrid and Barcelona's extensions. It established the 'Comisión de Ensanche' (Eixample Commission) as a managing body that consisted of five city councilors and five landowner in the area.

The Commission had to present an urbanization and sewage plan that meets the demands of the Act where its article 29 stated that:

*"Art. 29. [...] en el plazo de seis meses se presentaran al Ministerio de la Gobernacion, para su aprobacion, las reformas parciales y ampliaciones que en el plano general del Ensanche de Barcelona, aprobado en 1859, se hayan introducido y carezcan de aquel requisito"* (Ley de Ensanche de Madrid y Barcelona, 1893: 12).

This matter that was made easier with the previously approved Garcia Fària plan and the Eixample's new general urbanization and development plan (1894) of chief engineer José M<sup>a</sup> Jordan. The urbanization process started with the construction of streets to provide access to the newly built plots. The various services, sewers, main water, and lighting was on the other hand a slow procedure and a step-by-step process. The Act states that squares, streets, sewage system, water installation, sidewalks, pavements, and street lights are to be financed<sup>49</sup> through the Ensanche's funds.

<sup>49</sup> However, neither the sewers nor the pavement was installed as per the Act, and it was the owners who started paving in front of their buildings. For more info check Danae Esparza Lozano's PhD thesis (2014) 'El diseño del suelo: el papel del pavimento en la creación de la imagen de la ciudad.'

*“Art. 6. Serán de cargo de los fondos del Ensanche, y se considerarán de interés preferente, el importe de las obras de su urbanización, las cuales comprenderán la apertura de calles, plazas ó trayectos que comuniquen y unan la población antigua con la moderna de aquél, la red de alcantarillado, la de instalación de agua, el afirmado y empedrado, las aceras, el alumbrado en las calles y plazas de las manzanas de casas contiguas á la población del interior y á la parte del ensanche en que se hayan establecido estos servicios ó en cuyas calles ó trozos existan edificaciones que comprendan, cuando menos, una longitud de 200 metros en cada una de las aceras” (Ley de Ensanche de Madrid y Barcelona, 1893: 4).*

Moreover, landowners who ceded their land for public use especially the ones on which a square, street or any new construction, were excused from paying property taxes and surcharges.

*“Art. 28. A las empresas y particulares que cedan gratuitamente la totalidad de los terrenos necesarios para una calle, plaza, paseo ó trayecto parcial, costeando además los desmontes, construyendo las alcantarillas y estableciendo los servicios de aceras, pavimento y alumbrado, se les condonará el importe de la contribución territorial y recargos municipales ordinario y extraordinario, que hubieran de satisfacer sus fincas en la vía de que se trate, por el tiempo y en la forma que el Ayuntamiento determine, con aprobación del Gobierno, en Consejo de Ministros” (Ibid.: 11).*

The 1893 Enabling Act dictates that it is the Commission’s obligation to press the City Council to open squares and streets; draft a general sewage, urbanization plan and other infrastructural works; present a report with general and specific budgets and costs of each square, street or service including the period of time necessary for their completion.

*“Art. 17. Es la competencia de la Comisión de Ensanche:*

*1. ° Proponer al Ayuntamiento la apertura de las calles, plazas o trayectos á que se refiere la relación segunda, prescripta en el art. 37 de este reglamento.*

*Art. 18. También está obligada la Comisión á proponer al Ayuntamiento, oyendo á los funcionarios facultativos correspondientes, y á los propietarios en su caso, el plan general de alcantarillado y demás obras de urbanización en todas las vías comprendidas en la relación primera, á que se refiere el art. 37 de este reglamento, determinando en una Memoria general y en presupuestos parciales y específicos el coste de cada servicio en cada calle ó plaza, las razones que aconsejen y sean fundamento de la preferente ejecución de uno ú otro, y su establecimiento en una ú otra sección de cada zona, el período de tiempo necesario para la terminación de dichas obras, los medios que puedan facilitar su relación y las cantidades que anualmente se hayan de consignar en el presupuesto para llevarlas á cabo.*

*Art. 19. [...] cuidará también de que se instalen todos los servicios municipales en aquellas calles ó plazas que cuenten edificadas, en ambas aceras, una extensión de 200 metros [...]” (Ibid.: 22)*

*“Art. 37. La Comisión de Ensanche [...] formará inmediatamente después de constituida, un proyecto de urbanización total presentando una relación de las calles, plazas ó trayectos*

*de los respectivos ensanches, explanadas ó urbanizadas en todo ó en parte, y otra de las demás cuya explanación no se haya comenzado, clasificando las vías comprendidas en esta segunda relación, en preferentes y secundarias, y además presentará los presupuestos respectivos. Para llevar á cabo el proyecto de urbanización y la clasificación anteriormente expresada, deberá tener en cuenta los planos aprobados” (Ibid.: 27).*

*“Art. 49. [...] El presupuesto de gastos contendrá los créditos necesarios para entender, con arreglo á los recursos, á las obligaciones siguientes: [...] Servicios municipales de apertura y alineación de calles y plazas, de aceras, de empedrado y afirmado, de alumbrado y arbolado, y de fontanería y alcantarillas. Podrá contener igualmente una consignación para gastos eventuales e imprevistos que no exceda de 0’50 por 100 de la totalidad de los ingresos” (Ibid.: 30, 31).*

The urbanization of the Ensanche was a long process and given the lack of resources the City Council started, as a first stage, the initial opening and leveling of the expropriated land, placed curbs delimiting the sidewalks, and planted trees but without carrying out the sewage network nor paving the streets as Magrinyà (2008) described. However, the coincidence with the great urban planning event, the 1929 Universal Exposition, helped in accelerating the work and completing various streets and axes.

*“La Comisión de Ensanche encarga al jefe de Urbanización y Obras, Felipe Steva i Planas la redacción del pliego de condiciones con “destino a las aceras de todas las calles comprendidas en la zona formada por el paso de San Juan, Urgell, Rondas y Diagonal, con exclusión del Paseo de Gràcia y Calle de Cortes, cuyo material deberá ser de las condiciones fijadas para él, en las aprobadas por el Excelentísimo Ayuntamiento en consistorio del 5 de Junio último”. El primer “Pliego de condiciones para la adquisición de losetas de cemento Portland, con destino a la construcción de nuevas aceras en las vías públicas del Ensanche de esta ciudad” estipula las condiciones que deben tener estas losetas, sin embargo deja abierta la forma y el dibujo de éstas: “Artículo 2. Condiciones que deberán reunir las losetas : Dichas losetas podrán tener la forma y la figura geométrica cuadrada, rectangulares o cualquier otra que estime conveniente la sección facultativa, su grueso será de cuatro centímetros y estarán formadas por una capa de mezcla de cemento Portland de un espesor no inferior a quince milímetros. Su cara superior deberá ser lisa, lustrosa, pudiendo en ella formarse dibujos por medio de ranuras o cantos biselados y su cara inferior podrá ser rugosa o con ranuras a fin de facilitar su adherencia al ser colocadas en obra”.*

*“Artículo 6. Forma y dimensiones de las losetas: La forma que habrán de tener las losetas deberá ser análoga a las que se han empleado recientemente en algunas calles del Ensanche de esta ciudad, serán perfectamente planas y de figura cuadrada, rectangular, hexagonal o cualquiera otra que estime conveniente la jefatura. Las dimensiones podrán variar entre catorce centímetros como lado mínimo y veinte como lado máximo. En el caso de adoptarse otra figura geométrica su superficie estará dentro de lo que resulta de las dimensiones indicadas para las piezas de forma cuadrada. En todas ellas el espesor o grueso total será de cuatro centímetros” (Esparza Lozano, 2014: 163).*



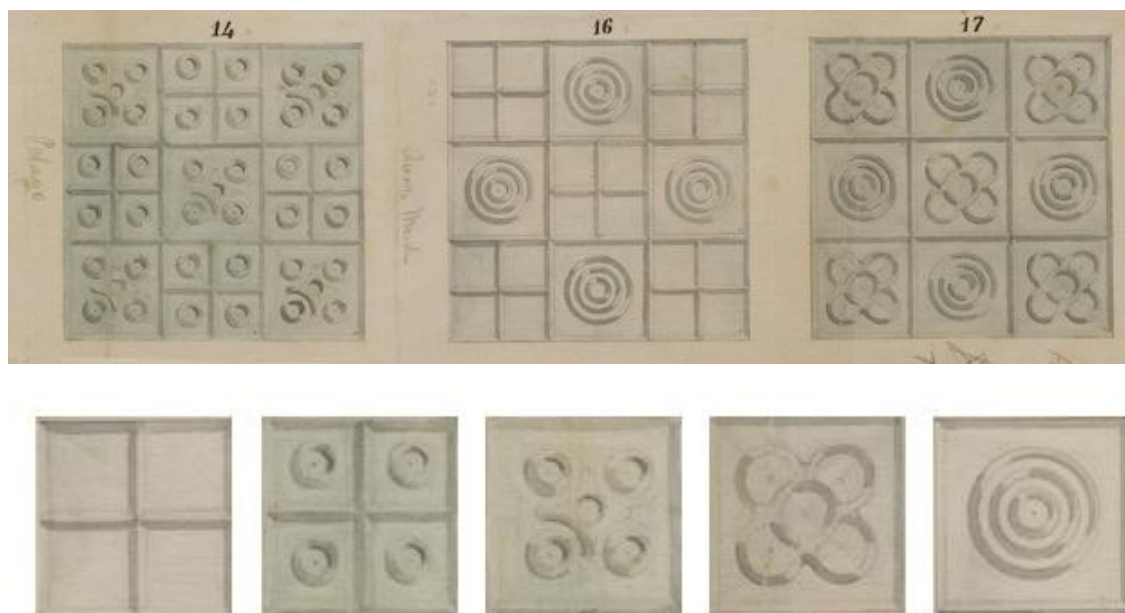


Fig. 46 Details of the 5 models finally auctioned on May 16 1907 (AMCB, 1906 In Esparza Lozano, 2014)

### Reactions to Plan Cerdà and the Early Densification of the Eixample

Cerdà's Plan faced many criticisms ranging from political and financial reasons to his overall plan and construction. Many were in favor of Rovira i Trias's plan especially that in 1860 Madrid government intervened and announced the approval of the Cerdà's plan cancelling Rovira i Trias's previous triumph.

*"The decision to use Cerdà's plan was taken within the context of the long struggle -dating from the eighteenth century- between the central power and the city-halls. Although the latter had gradually recovered their power, the government wanted to maintain the initiative in some crucial matters. For this reason, the plan by the engineer Cerdà was imposed in preference to the plan by the architect Rovira i Trias, defended by the city council. In this case, history has shown the decision to be right. Cerdà's project did not so much extend Barcelona as give it a new overall form. Being imposed by the central government, the inhabitants of Barcelona viewed the Pla Cerdà with distaste, practically until the time of its defence by the rationalist architects" (Montaner, 1987: 45).*

Josep Puig i Cadafalch<sup>50</sup> was one of the famous architects that opposed his urban and economic plan (Martorell, 1959), he criticized the new modern city, meaning the ensanche,

<sup>50</sup> Josep Puig i Cadafalch, architect and politician, president of the Mancomunitat de Catalunya (1917-1924), founder and councilor of the Lliga Regionalista in the City Council, historian of Catalan arts and politics, involved in the 1929 Universal Exposition, and responsible for many projects in Barcelona like Casa Martí, Casa Amatller, and Casa de les Punxes among others.

as being unorganized and as *“un dels horrors més grossos del món, un dels horrors que de segur no té igual sinó en las ciutats cursis de la América del Sur”* motivated by a *“sacra democràcia”* and *“santa igualdad”* (Puig i Cadafalch, 1900-12-29: 1).

He added that *“En Cerdà concebia les ciutats com una cristallització d'un mineral, tal com les ciutats americanes. [...] La seva urbanització com una malura geomètrica, devia envair-ho tot i topar amb tot”* (Puig i Cadafalch, 1927: 11).

Torres, Llobet, and Puig pointed out that *“[...] Josep Puig Cadafalch, quan havia començat la regeneració de l'Ajuntament i estava compromés en la difusió d'una cultura urbanística «moderna», li interessava tant la lliçó política de l'afer Cerdà, la imposició centralista del projecte enfront de les alternatives locals, com la seva manca d'organització i la constatació de l'absència de la cultura «arquitectònica» dels traçats, i una ben escassa adhesió als postulats del modern «Art Cívic» europeu”* (1985: 67).

Moreover, his plan was compared to Haussmann's. Evidently to Cerdà, Paris was his main reference especially its boulevards, infrastructure and Alphand's gardens and urban furniture.

*“Els coneixements que va adquirir en els viatges que va fer del 1855 al 1859 enriqueixen els arguments de Cerdà. En aquest període, l'enginyer va viatjar a París, on va contactar amb l'experiència urbanística francesa. La ciutat que va renovar Haussmann és la principal ciutat de referència. Li va servir, sobretot, com a experiència en qüestions d'infraestructura urbana (subministrament d'aigua, sanejament, pavimentació...)”* (Puig, 1990: 32).

Just like Haussmann he was preoccupied with traffic and circulation, and was also accused of tracing streets in a certain way to probably repress popular riots.

*“No hace falta recurrir al tan manoseado argumento que utilizaban a la vez Haussmann y Cerdà, sobre la reforma y ensanche de ciudades eliminaba las malas condiciones de vida y por tanto la tendencia revolucionaria de sus habitantes”* (Bohigas, 1958: (471) 9).

However, as Bohigas (1958, 1963) argued, Haussmann in his plan neglected the human approach and with the 'eventrement' and his already famous 'rue-corridor' entire neighborhoods were sacrificed. While Cerdà's plan, with its pros and cons, had new and current treatments of outdoor spaces and a new concern for the organic –unlike Puig i Cadafalch's opinion– and social sense of the city. And over a geometrical rigid grid of streets he superimposed the structure of neighborhoods with their building blocks, gardens and squares which runs counter to Mumford's idea that *“the sacrifice of the neighborhood to the traffic avenue went on all during the 19th century”* (1961, 489). Each building block is well thought and designed according to society's different classes, gender, marital status, and age. And more importantly the squares and gardens proposed for each block for the wellbeing of families, children and elderly, shows that the human



approach is not at all neglected which, according to Bohigas, is the element that places Cerdà over his contemporary colleagues, like Haussman.

*“Però en el cas de Cerdà [...] en teoria, el fa molt més actual que Haussmann. Es tracta d’un nou tractament dels espais exteriors i d’una nova preocupació pel sentit orgànic i social de la ciutat. Haussmann, en el seu relatiu abandó del plantejament humà, en la seva antiarquitectònica visió del tema de l’habitatge, va implantar aquesta ja famosa rue-corridor monumentalista que després, en les posteriors versions degenerades, ha crucificat ciutats senceres. Cerdà. En Calvi, sobre una zarza viària tremendamente rígida, assaja unes agrupacions d’edificis i zones ajardinades, de places i eixamplaments virais que l’emparenten disrectament amb l’urbanisme anglès. [...] Cerdà sap superposar a la xarxa rectangular la intricada complexitat orgànica d’una ciutat feta per la integració de barris”* (Bohigas, 1963: 90, 91).

In his article on Garcia Fària’s sewage plan, Gómez Ordóñez described Cerdà’s plan as progressive and “forward-looking”. He argued that the sanitation of Barcelona was based on and validated by large scale European projects and “the fact that such a technical jump was possible to the extent that it was required by the Cerdà project, is evidence of the tremendously forward-looking nature of the latter: a model capable of serving as the framework for urbanizing operations of the advanced capitalism of the eighteen-eighties and at the time of its first major crisis (1992: 381) [...] and it filled the gap between the XVIII-century city and its regulation and the city of 1880” (1992: 382).

When the construction of the Eixample started it was executed differently than Cerdà’s original plan. Some of the reasons are that the plan lacked an authentic financial base and adequate management (Bohigas, 1958); there was no sufficient coordination between its urban, economic and demographic possibilities (Bohigas, 1963); and the constant modifications to the Eixample Bylaws<sup>51</sup> to accommodate the current interests and needs. In the original plan Cerdà proposed building two or three sides of the blocks leaving 50% of the plot for interior courtyards and gardens; 20 meters building depth; and 16 to 20 meters buildings height (ground floor plus 3 floors) depending on streets width which varied between 20 and 30 meters to 50 meters. That is, from the approximately 12,500 m<sup>2</sup> block dimension, 5000 m<sup>2</sup> are destined for buildings and 7500 m<sup>2</sup> for open free space with light and ventilation.

However, by the 1900s the ‘Ley de Ensanche’ of 1891 allowed the four sides of the block to be built including the interior courtyards that got occupied by single-storey construction; building depth increased to 28 meters with dim interior patios; and building height increased to 22 meters (ground floor plus 5 floors) depending on the width of streets (20-30m). That is, from the approximately 12,500 m<sup>2</sup> block dimension, 9200 m<sup>2</sup> are destined for buildings leaving 3300 m<sup>2</sup> or less for open space that was in fact enclosed on four sides with no sufficient light and ventilation due to the increase in building heights (Busquets,

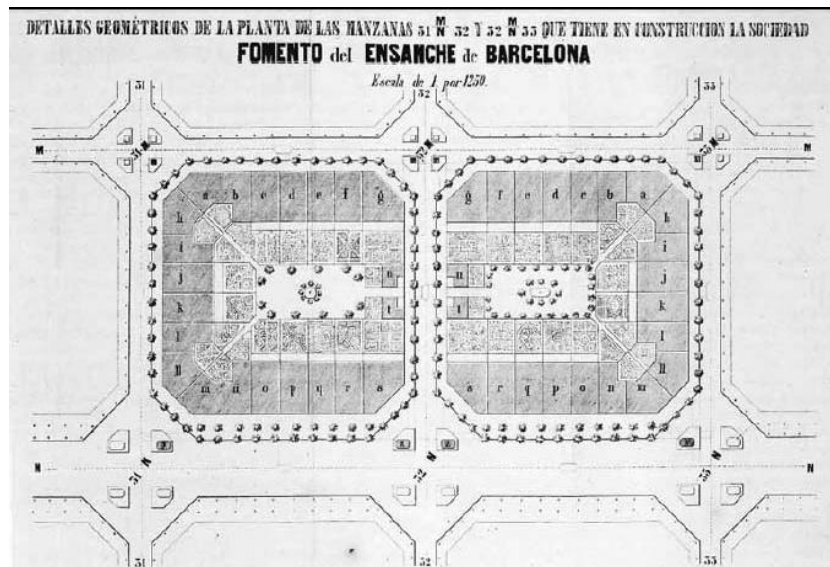
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<sup>51</sup> The ‘Ley de Ensanche’ 1862, 1879, 1891, 1932, 1942, 1947, 1958

1992; Sabaté, 1992; Bohigas, 1958, 1963; Martorell, 1959; Martorell, Florensa, Martorell, 1970; Magrinyà, Marzá, 2009; Busquets, Corominas, 2009).

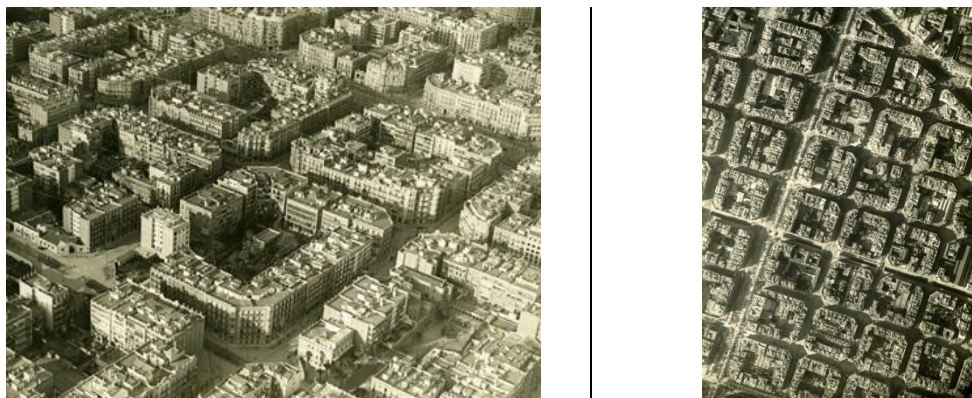
Cerdà, when analyzing the juxtapositions of buildings and courtyards, proposed different combinations designed specifically so that each room will have light, ventilation and hygiene. He was not in favor of interior patios and made it clear that joining more than two houses or totally closing the block is a “monstrosity”:

*“Juntar más de dos casas unas a continuación de otras y sobre todo venir a cerrar por completo el espacio de una manzana, son monstruosidades incompatibles con la cultura de nuestro siglo. Por eso suprimimos esa clase de combinaciones”* (Cerdà, 1855: 78).



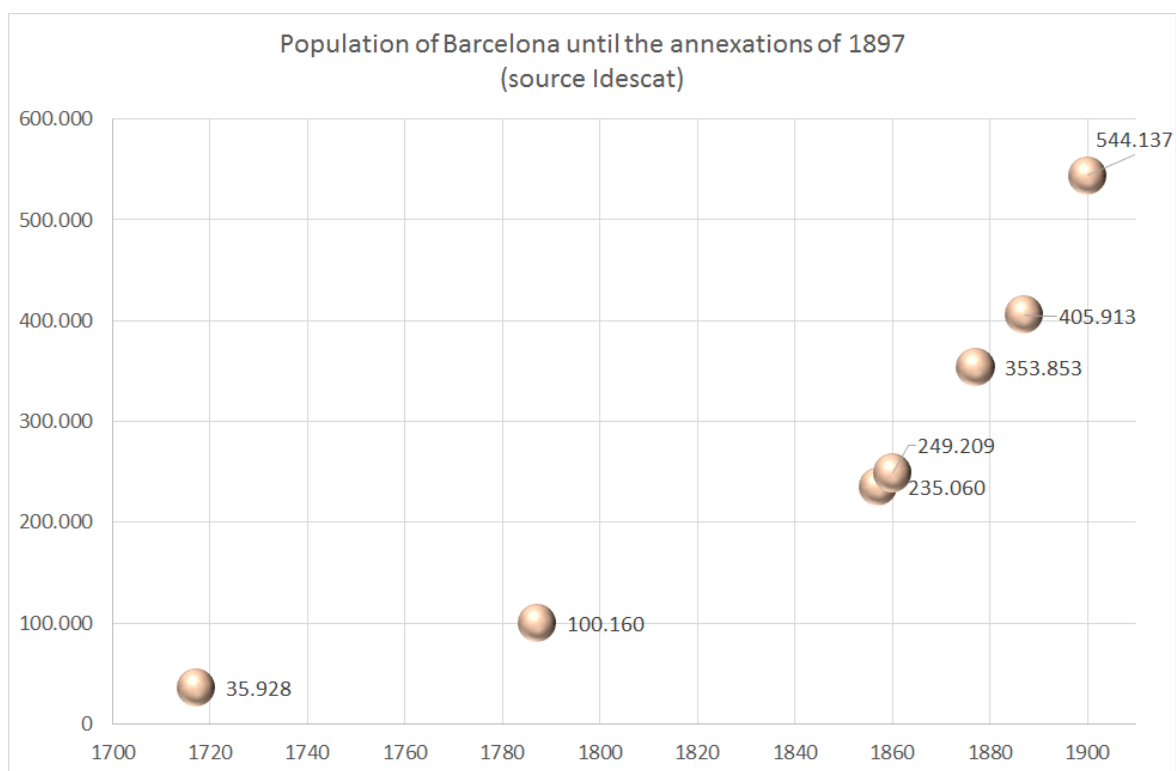
**Fig. 47** Plan of two blocks aligned with trees with interior squares and gardens elaborated by Cerdà for the Sociedad Fomento del Ensanche (Cerdà, 1861)

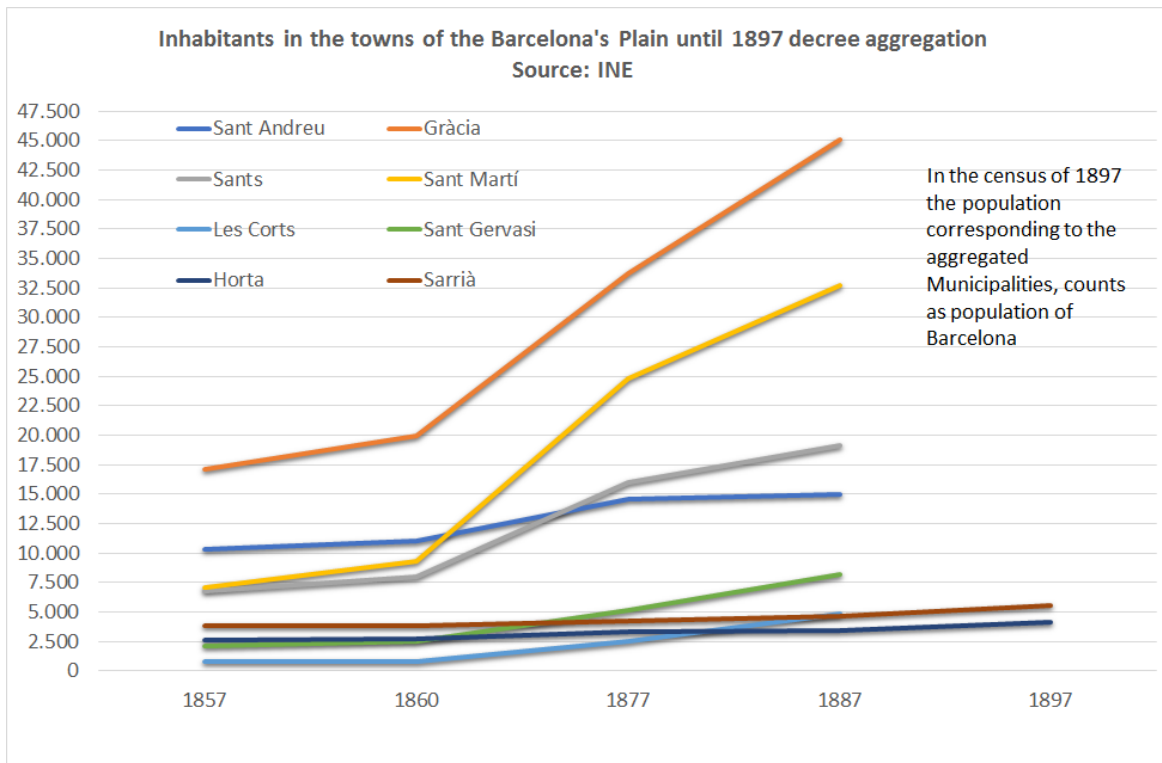




**Fig. 48** Cerdà's Eixample 1859 compared to the built Eixample in late 20s (Magrinayà, Tarragó i Cid, 1994 and AFB)

### Towards the Gross-Barcelona: Jaussely's preliminary plan (1905) and the urbanization Plan (1917)





**Fig. 49** Elaboration of CR Polis from Idescat and INE

The population development of Barcelona as well as the populations of its Plain began to increase starting 1860. In addition, as stated in the exhibition of the ‘Decreto de Agregaciones’ (Decree of Aggregation) of 1897:

*“El Ayuntamiento de Barcelona viene pretendiendo desde hace muchos años que el Gobierno, haciendo uso de la facultad que el art. 10 de la Ley Municipal (1877) le concede para ensanchar el término de las poblaciones de más de 100.000 habitantes hasta una distancia máxima de seis kilómetros, agregue al de aquella ciudad varios de los más próximos.*

*Acerca de la conveniencia y justicia de esa petición apenas cabe y a duda ni debate. Invertidos los términos naturales del asunto la unión de los pueblos y la confusión de los límites se han realizado antes de estar autorizadas. No se trata de unir á una circunscripción municipal los arrabales de otra, ni hay posibilidad dentro de Barcelona misma de hacer la división exigida por las leyes para algunos servicios entre el casco, el radio y el extrarradio. Son los cascos mismos los que están ya en contacto inmediato. Las calles del Ensanche, lo mismo las que han de ir de río á río, que las dirigidas desde el llano á la montaña, atraviesan términos municipales distintos. Algunas tienen la acera de los números pares en un pueblo, y la de los impares en otro, con diferencias absurdas en los servicios, así locales como generales. La administración del impuesto de consuntos lucha con dificultades absolutamente insuperables, y la defraudación se burla con completa impunidad, de todos los preceptos y reglas administrativas”.*

Thus, on April 21, 1897 the Decree of Aggregation was enacted and the surrounding towns were aggregated to the city of Barcelona. The Art. 1 of the decree adjudicated that: *"Quedan agregados en su totalidad al término municipal de Barcelona los de Gràcia, San Martín de Provensals, Sans, San Andrés de Palomar, San Gervasio de Cassolas y Las Corts"*.

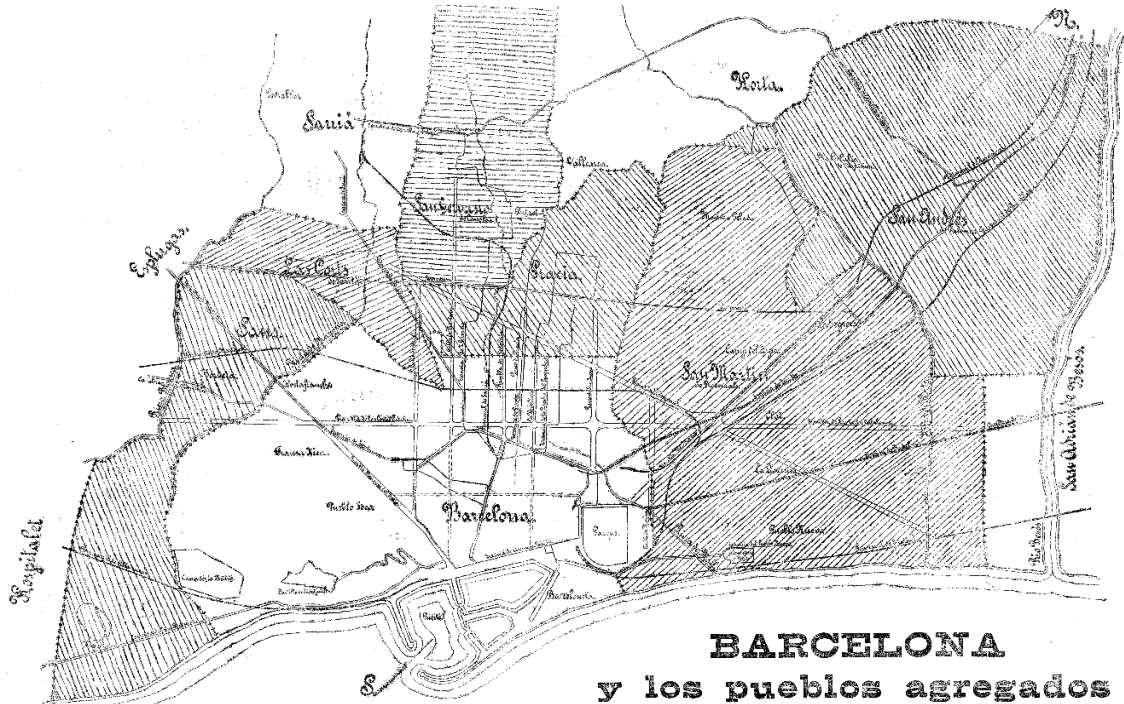


Fig. 50 La Vanguardia published this plan to give news of the Decreto de Agregaciones (LVG, 1897-04-25)

The 19th century was over with the annexation of the towns and the 20th century began with a proposal for a new Barcelona. A new Barcelona that responded to a different stage of economic order and, above all, to a situation in which the political wills were changing marking almost the complete end of the Spanish colonial empire in 1898. As Puig i Cadafalch pointed out at the turn of the century:

*"Aquesta ciutat nova feta tant á la moderna, respectant el paper del "barceloní comú", es un dels horrors més grossos del món, un dels horrors que de segur no té igual sinó en les ciutats cursis de la América del Sur [...] La millor obra ab que podriam ianugurar el sigle que comencem, fora rompre aquexas travas que com las muralles antigàs ens cibexen y li priva de ser una Ciutat moderna á l'europea"* (Puig i Cadafalch, 1900: 1).

*Els carrers, la justícia exigia que fossin iguals, las isalas iguals, els xamfrans iguals, una ciutat uniforme extesa indefinidament, sense més interrupció que unes quantes vies mortes, sense més eixamplaments qu'els de davant d'algun edifici públich, y alguns parchs rectangulars que l'avara pobresa ha suprimit"* (Puig i Cadafalch, 1901b: 1).

*¿Qué haurà de ser la Barcelona del pervindre? [...] Cal limitar lo més aviat possible, el desenrrollo d'aquest tablero d'escachs que no respoón a rés, y projectar desde una ronda límit l'enllàs de les poblacions agregades -a Barcelona, y cal fer això ab un esperit ample á*

*la moderna, tal com se fá pel mon civilisat; cal estudiar el modo de trencar la uniformitat aclaparadora d'aqueixos quadrats de falansteri comunista ó de quartel d'esclaus; cal tencarla fent vies radials que liguin els pobles del plá ab Barcelona, aprofitant las velles carreteres, fent anglus aguts que contrastin ab l'efecte de carta aixetada dels xafrans, fent línies tortes y islas irregulares; cal fer boscos y jardins en els llocs no edificats; cal aixecarhi edificis publichs aïllats que donguin una idea diferente de la del quadrat escantonat de sempre; cal fer organismes ab vida, ab llibertat y varietat que'ns han mancat fins ara"* (Puig i Cadafalch, 1901a: 1)

In 1902, the 'Asociación de Arquitectos de Cataluña', responded to a questionnaire set by the City Council in which is stated: what roads of the Eixample pertinent to be prolonged to improve the link with the aggregated towns; what new avenues necessary to be opened; how junctions should fit in; what areas of urbanization should be planned "*para el desarrollo de edificaciones industriales, barrios obreros, etc*" –in other words early zonification–; what kind of boundaries should urban areas and zones of rural development have; study the location of parks, squares and public buildings; and finally what modifications should be introduced in the current municipal ordinances, both in general and those of the Eixample.

The 'Junta Directiva' issued in 1902 a dictum that focused on the following points:

*"Estas convicciones nos han impuesto la necesidad de proponer la reforma del actual plano de Barcelona, tentiendo á:*

*1º Aprovechar en lo posible todo lo existente.*

*2º Mejorar lo que, sin estar en las condiciones del número anterior, sea susceptible de utilidad en el plan general.*

*3º Proponer vías de comunicación directas entre cada uno de los núcleos entre sí.*

*4º Realización de Rondas para cada uno de dichos grupos, que conduzcan la vialidad á los puntos más necesarios de los mismos.*

*5º Establecer bosques, parques, jardines y zonas de urbanización rurizada en los sitios más sanos y en número suficiente para que sean fácilmente accesibles desde todas las partes del conjunto urbanizado.*

*6º Que el Excmo. Ayuntamiento, imitando lo que ya se ha hecho en otros puntos, dé más importancia á la cuestión de barrios obreros, y la resuelva por un concurso especial, fijando en la convocatoria lugares de instalación sanos, de fácil comunicación y de precio bajo para la edificación .*

*7º Formular en un dictamen aparte las propuestas la modificación de las ordenanzas municipales"* (Vilaseca, Sagnier, Granell, Coquillat, Maymó, Sellés, 1903: 258).

For a more detailed study seven nuclei were established (Montjuïc, Barcelona, Sants -Las Corts, San Gervasi, Gràcia, Horta, San Martín) for which several solutions for their connection with the ensanche are summarized in the following plan:



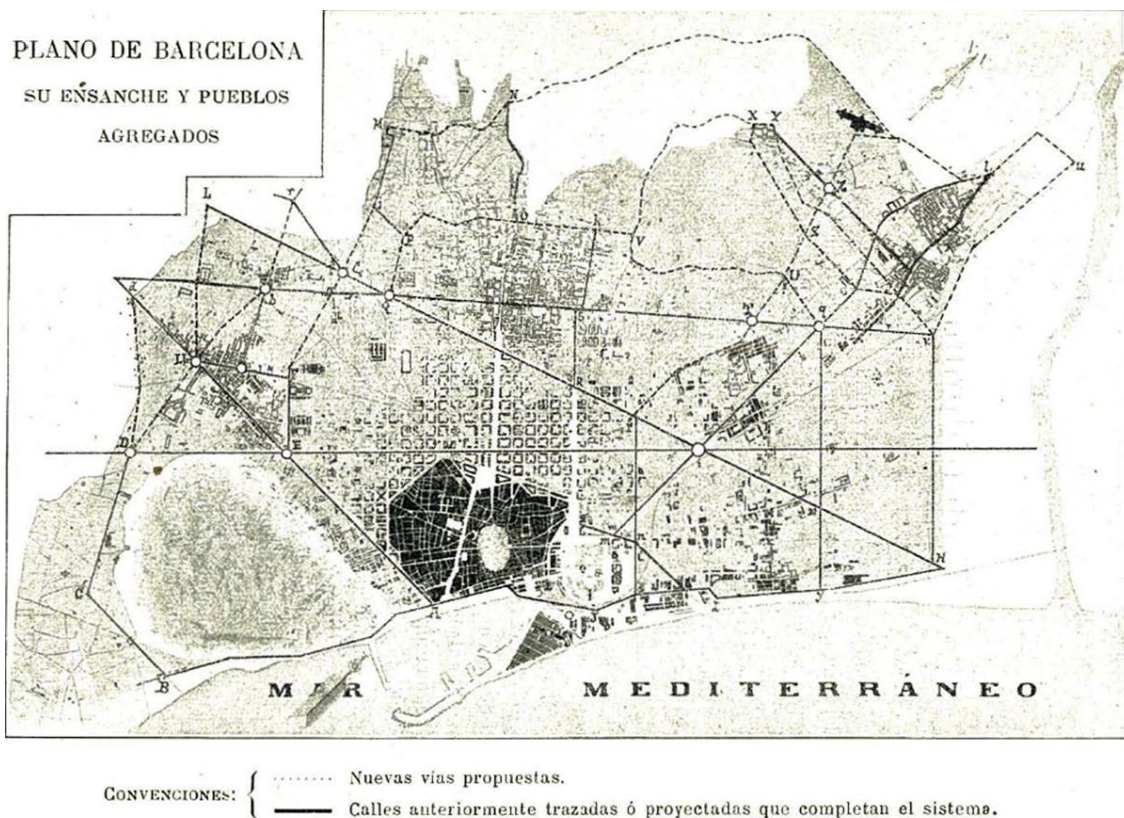


Fig. 51 Plan of Barcelona, the ensanche and aggregated towns (Asociación de Arquitectos de Cataluña, 1903)

Finally, in 1903, the City Council –with its newly elected party Lliga Regionalista (1901) and its counselor Puig i Cadafalch– convened a contest to resolve the problems of the Eixample (Plan Cerdà) and its connection to the new aggregated municipalities. Winning the contest was the French architect and urban planner Léon Jaussely<sup>52</sup> whose plan, ‘Plan de reforma y enlaces de los pueblos agregados’ (Interconnection Plan), was

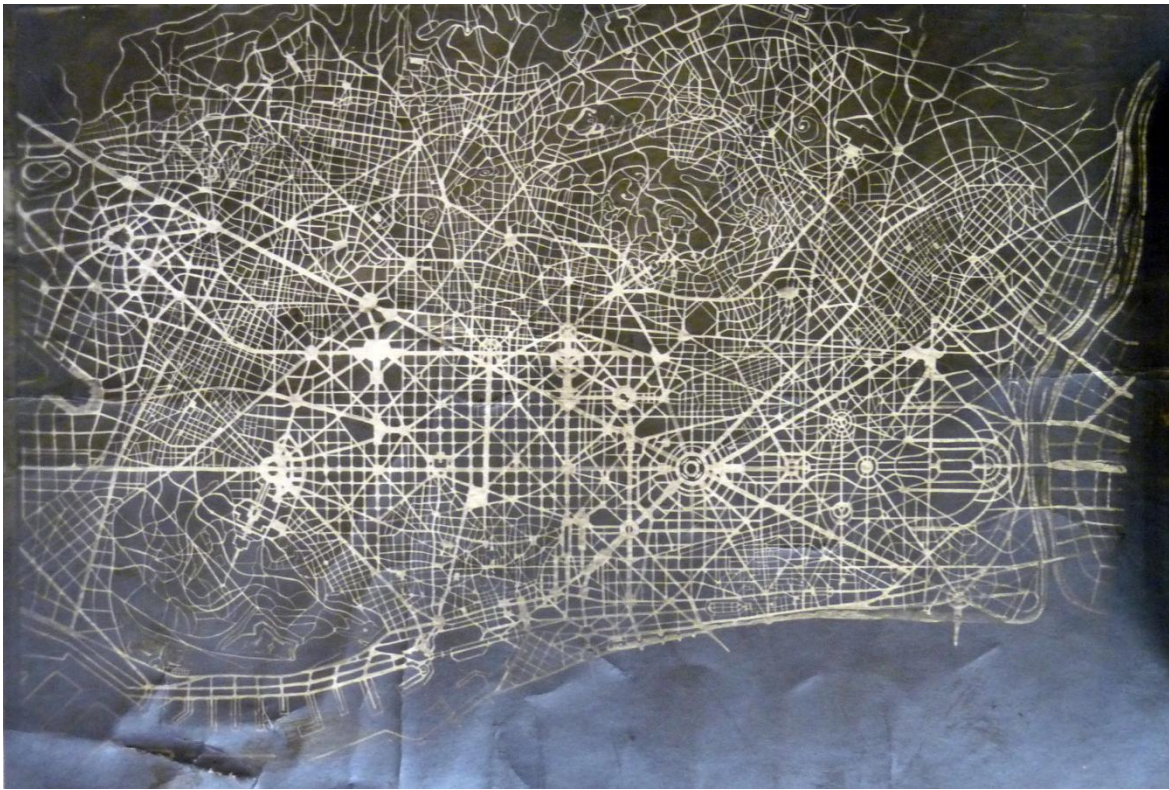
<sup>52</sup> More info on Jaussely’s plan written by Pompeyo Gener can be found in *Anuario Estadístico de la Ciudad de Barcelona* (1907) in ARCA, and (Torres, Puig, Llobet, 1985).

As Remesar (2016) stated: “Under the umbrella of Social Museum in 1905, propelled by the General Association of Municipal Engineers, Architects and Hygienists, creates the Section of Urban and Rural Hygiene. In 1910, several members of this Section attend the International Conference on Town Planning (London) and participate in the international competition for the Gross Berlin. Soon after they found the French Society of Architects and Planners (SFAU) with the participation of personages like Agache, Auburtin, Bérard, Hébrard, Forestier, Jaussely, Parenty Prost or Redont; Eugène Hénard being its chairman. As noted above, members of this Section develop urban studies and projects for French cities but also for various European and American cities, building relations with the British, American and European town planners. As it will happen later with the Social Museum of Barcelona (1909), members of this Section are vividly influenced by the proposals by Ebenezer Howard, Parker and Unwin concerning the garden city, but, too, by the Belgian idea of *Art Public*. A clear example of this duplicity would be Barcelona faced, on the one hand, to the problem of the Interior Reform of the historic area and on the other, to the expansion of the city on a metropolitan scale. Referring to the reform, Puig i Cadafalch, one of the biggest critics of Cerdà and later

accepted on the 12 December 1907. He covered the whole city planning and made a critical study of Cerdà's Plan pointing out its pros and cons. His plan was based on three criteria: zoning of activities (residential areas, worker housing, industry...), road system that was organized around five radial axes and two ring roads that include Gran Plaça de Les Glories and green spaces system of different shapes and sizes inspired by Paris and London's models. He introduced to Cerdà's plan oblique elements and pointed out that despite its hygienic nature, grand spirit and expansion, the plan was homogeneous, rigid, and lacked a backbone, contrast, individuality, diagonals, and a railway layout, in addition, it failed to originate squares and gardens, assumed the same circulation flow in all streets, and allowed the placement of monuments only in intersections.

Jaussely's observations were what the Lliga had aspired to, as Roca (1974) commented, but despite that, his was not fully executed.

Puig i Cadafalch continued with his criticism asserting that "*Les adaptacions diverses que ha sofert el planol no han pogut treure a la ciutat nova son aspecte monóton. Ni la reforma projectada per En Jaussely, en gran part abandonada, ha aconseguit fer-la passar de ciutat cristal·lina a ciutat orgànica*" (Puig i Cadafalch, 1927: 11).



**Fig. 52** Jaussely's preliminary Plan de Enlaces of Barcelona. A Little known image in which diagonals and roundabouts are valued (Cité de l'Architecture et du Patrimoine. Fons Jaussely)

president of the Commonwealth of Catalonia stated, "*We must study the reform from an artistic point of view (...). It is necessary to do what Buls made in Brussels with the Grand Place: not to destroy, but to rebuild, returning things to their primitive beauty*" (Puig i Cadafalch, 1901b). On the relationship between the thoughts of French urbanism and the American movement of the City Beautiful see (Fiol Costa, 2008)" (Remesar, 2016: 23)

Jaussely's Plan, which was well received, was not fully or immediately developed. In the year of its initial presentation, Puig i Cadafalch already had posed new needs of a broader metropolitan reach: *"I és clar que per aquesta base no's pot parlar sisquera dels plans actuals, ni de les urbanitzacions particulars adjuntes, ni del projecte Jaussely, encara que aquest hauria de servir de punt de partida"* (Puig i Cadafalch, 1905: 3). It was in that moment when the Lliga proposed a new Universal Exposition dedicated to Industrias Eléctricas and planned for 1917. But it wasn't until 1914, with the Mancomunitat de Catalunya already constituted, that the obligations of urban transformations for the Expo were set:

*"La Mancomunitat, doncs, al consagrar oficialment a la ciutat de Barcelona la capitalitat administradora de la nació catalana, accentua i referma el fet natural de la capital intel·lectual, a creixer, intensifica la eficacia d'aquell imperi de esperit. I per tant, tot alió que compona la matèria de irradiació, tot allò que per contagi, exemple o assentiment pot ser imposat per Barcelona al reste de Catalunya, el bé de Catalunya demana sigui depurat, regulat, intervingut en una forma o altre, com si fos substància de legislació, com si fos matèria administrativa"* (Rucabado, 1914: 115).

Although, as pointed out by Maluquer:

*"La simpàtica societat cívica la Ciutat Jardí<sup>53</sup> s'ha dirigit recentment a l'Ajuntament de Barcelona cridant-li l'atenció sobre la necessitat de confeccionar el plan general d'urbanització de la zona total suburbana, i encara que de moment no la pregona amb l'extensió a que'ns referim nosaltres, és de tot punt lloable i digna de tota mena d'apoi la iniciativa de l'esmentada Corporació"* (Maluquer i Nicolau, 1914: 1,2)

The preparations of the Exposition brought to Barcelona Forestier in 1915-1916, who with his assistant Rubió i Tudurí, started with the projects of parks in Montjuïc, the site of the Exhibition. On the other hand, the City Council began the elaboration of a 'Plano General de Urbanización de Barcelona' (F. Romeu, P. Falqués and E. Porcel) that after several modifications was approved in 1917.

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<sup>53</sup> La Sociedad Cívica Ciudad jardín (Franquesa Sánchez, Jordi 2008; Castrillo Romón, Maria A. 2000; Musons, Albert 1984; Puig Gairalt, Ramón 1925), coordinated by Ciprià de Montoliu (Muñoz Fibla, Guim 2009; Roca, Francesc. 1971), was a department of Museo Social de Barcelona.



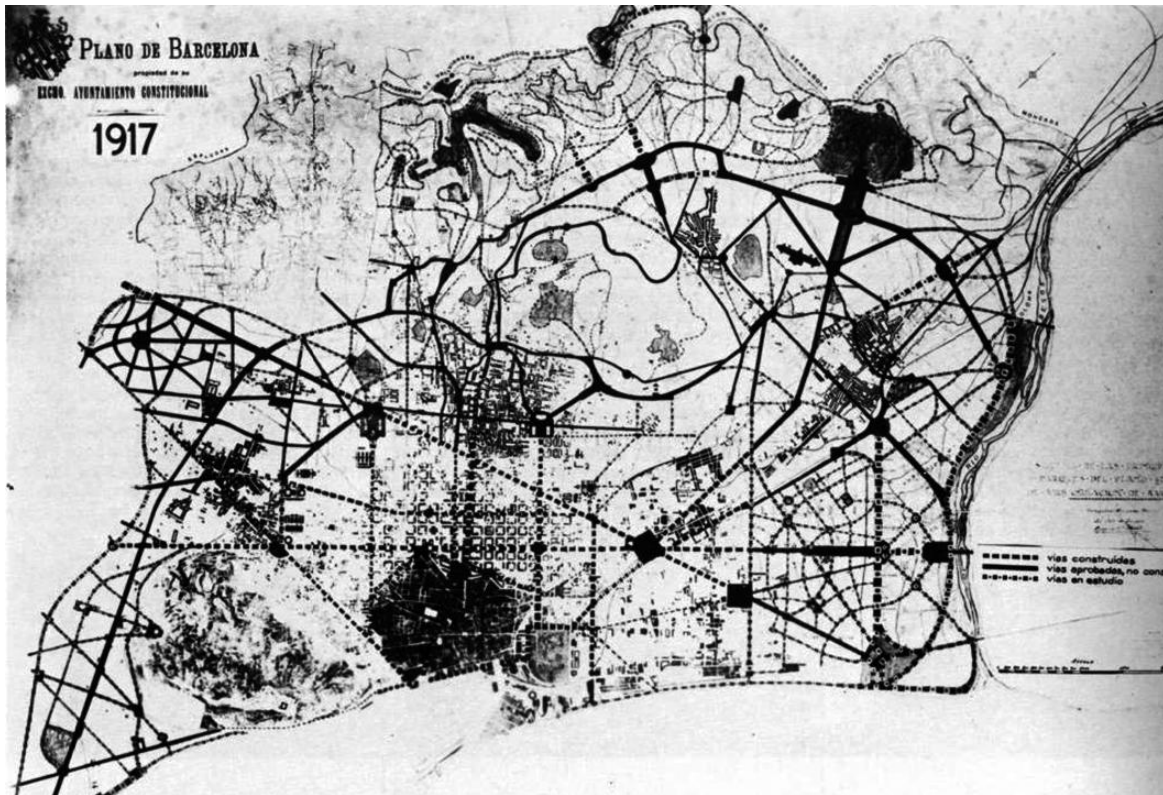


Fig. 53 The Plan de Enlaces as it was approved. The "vias en estudio" were excluded from the approval agreement, and the parks were approved with no clear cartographic boundaries thus they remained diffused in the plan. The land owner's pressure and the diluted support of local powers caused the failure of the plan. (Torres, Llobet, Puig, 1985).

### New Plan for a New City

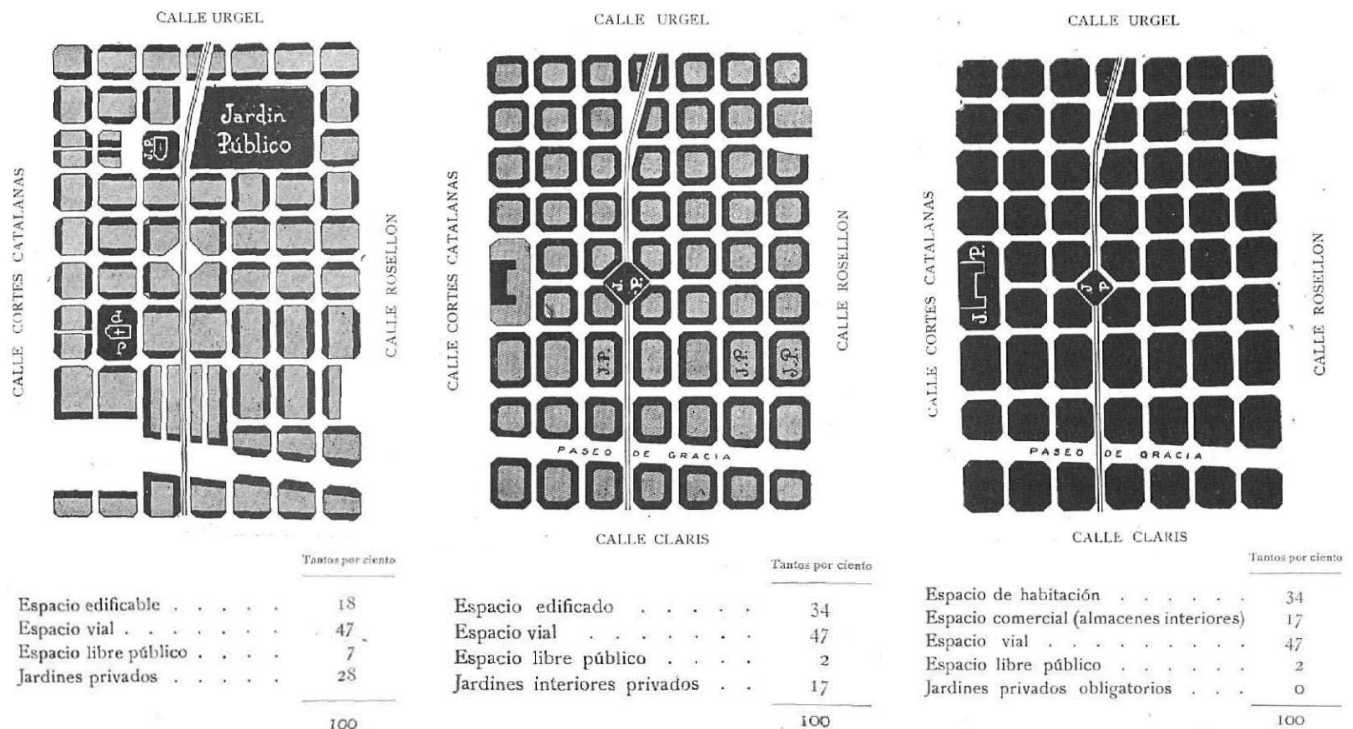
Nicolau Marià Rubió i Tudurí<sup>54</sup> in his text *El problema de los espacios libres*, presented earlier in the 'XI Congreso Nacional de Arquitectos' in 1926, pointed out that Cerdà's plan had proposed an Eixample rich enough in open spaces. But, the urban tradition, when the Eixample's construction was at its peak, considered open space a wasted space which contributed to the disappearances of courtyards, squares and gardens. He added that wasted or lost spaces are the ones intended for improper use, and in fact, it should be as the motto of 'Dirección de Parques públicos de Barcelona' "*es tierra perdida la que se destina a la edificación*" especially that one of the basic theories of open spaces is to fight against overcrowding.

<sup>54</sup> Nicolau Marià Rubió i Tudurí architect, urban and landscape designer, and director of the 'Dirección de Parques y Jardines'. He worked on creating Barcelona's park system between 1917 and 1937 with his mentor Jean Claude Nicolas Forestier. He greatly influenced the policy of creating green spaces in the city and responsible for creating the gardens of Plaça de la Sagrada Família, Plaça de Letamendi, Plaça Francesc Macià, Turó Park, Palau Reial de Pedralbes, Montjuïc's parks, and the Diagonal, among others.

*“Con el plano Cerdà se hubiera podido—y debido—construir un Ensanche suficientemente rico en espacios libres, puesto que así lo disponía el proyecto aprobado. Pero la tradición urbana, como hemos dicho, no estaba para el despilfarro de terrenos. Con la edificación febril del Ensanche se reforzó más todavía el hábito de apretujamiento, este espíritu de estrechez que hace considerar tierra perdida toda la que no sea terreno edificable. Hay que reaccionar contra semejante espíritu, que perdura entre nosotros con obstinación. Debemos acostumbrarnos a admitir que la tierra perdida es aquella que se destina a un uso impropio, a un uso perjudicial, y este uso a que no debe destinarse la tierra es, frecuentemente, el de la edificación”* (Rubió i Tudurí, 1927-05-30: 148).

By showing a small sample of the Eixample, Rubió i Tudurí made a comparison between the original proposal, the blocks enclosed on all four sides, and the blocks with the disappearance of the interior courtyards, demonstrating the *“triste interpretación del Ensanche de Barcelona”* (Rubió i Tudurí, 1927-05-30: 149).

In his chosen sample, the theoretical density per Cerdà’s plan should not exceed 33 m2 per capita –noting that the Municipal Statute demands 50 m2 per capita or 200 m2 per family house– but in the execution it had reached about 15 m2 per capita.



**Fig. 54** Rubió i Tudurí’s comparison between (1) Cerdà’s proposal, (2) constructing the perimeter of the blocks, and (3) total construction of the blocks. Notice how the percentages in this same piece of the Eixample varies: built space from 18% to 34%, open public space from 7% to 2% and interior courtyards from 28% to 17% to 0 % (Rubió i Tudurí, 1927-05-30).



By the 1930s, during the Catalan Republic<sup>55</sup>, the 1932 Eixample Bylaw added a further floor and authorized an additional penthouse floor withdrawn 3 meters from the blocks façade, and the 1947 Bylaw authorized a second penthouse floor withdrawn 3 meters from the façade of the first penthouse increasing the height to 24.4 meters<sup>56</sup>.

	<b>Cerdà's proposal</b>	<b>Eixample Bylaw 1891</b>	<b>Eixample Bylaw 1932</b>	<b>Eixample Bylaw 1942/1947/1958</b>
<b>Blocks perimeter</b>	2/3 sides built App. 50% open space Open interior courtyard	4 sides built (whole perimeter). App. 30% open space Interior courtyard built 1 storey bldg.	4 sides built (whole perimeter) Total occupation of interior courtyard	4 sides built (whole perimeter) Introduction of semi-basements and basements Construction in interior courtyard reached 5.5 meters
<b>Blocks depth</b>	20 meters	28 meters Interior Patios	28 meters	28 meters
<b>Blocks height</b>	16 to 20 meters (gf+3)	22 meters (gf+5)	Adding 1 <sup>st</sup> penthouse 3 meters away from the façade	Adding 2 <sup>nd</sup> penthouse 3 meters away from the 1 <sup>st</sup> penthouse. Adjusted height without penthouses 24.4 meters <b>(1947)</b> Advancement of the penthouse limit to the façade <b>(1958)</b>

This table summarizes the change in the Eixample's regulations between the original Plan and the reality of that time, noting that in later years, with the PGM of 1976 and the beginning of the Barcelona Model, these regulations changed where the height of blocks was reduced to 20.75 meters and the depth to 26 meters and many of the interior courtyards were recuperated (Author's elaboration from different sources Martorell, 1959; Bohigas 1963; Busquets, 1992; Sabaté, 1992; Magrinyà, Marzá, 2009; Busquets, Corominas, 2009).

The GATCPAC<sup>57</sup> did their first attempt in revising and recovering Cerdà's Plan. They drafted their 1932 Macià Plan starting from his plan (Roca, 1974; 1977). In April and March of that same year the CIRPAC held their 4<sup>th</sup> CIAM Congress in the city and by 1934

<sup>55</sup> During the municipal elections held on April 12<sup>th</sup> 1931, the Republican parties won which led Luis Companys to proclaim the Catalan Republic and was shortly followed by Francesc Macià. In 1932 the Statute for an Autonomous Catalan Government was approved. Followed by internal conflicts, military strives between 1932 and 1937 the Generalitat was dissolved in 1939 with the uprising of Franco and Barcelona's fall to the Nationalist forces.

<sup>56</sup> Further infilling and densification of the Eixample will be discussed further in the thesis.

<sup>57</sup> In 1930, the GATEPAC were formed (Grupo de Artistas y Técnicos Españoles Para el Progreso de la Arquitectura Contemporánea) and later the GATCPAC (Grup d'Artistes y Tècnics Catalans per al Progres de l'Arquitectura Contemporània), where the 'C' stands for Catalan instead of the 'E' for Español. They were the Spanish and Catalan branches of the Le Corbusier's C.I.A.M, and their most famous members are Josep Lluís Sert, Antoni Bonet Castellana, Josep Torres Clavé, José Manuel Aizpurúa and Fernando García Mercadal. They published the famous magazine A.C., or 'Actividad Contemporánea' of which 25 issues were published between 1931 and 1937. They collaborated with Le Corbusier and Pierre Jeanneret, where the first started visiting Barcelona frequently after 1928. It was a very important time in Barcelona and in 1932 the 4<sup>th</sup> CIRPAC Congress was hosted in the city.

the Macià Plan was officially presented<sup>58</sup>. In their magazine A.C. (1934), after sharply criticizing Henard and Sitte's methodologies and all European Civic Art, they analyzed the hygiene situation of the old town with their 'Pla de Sanejament' (Sanitation plan) and the Eixample and proposed various solutions. Their notes about Cerdà's Plan are the first internal analysis of his urban project. According to them, the layout had its qualities and defects.

*"Aquestes qualitats i defectes ja no es refereixen a la política. Aquesta dimensió desapareix del debat en els anys trenta. I, en canvi, els problemes d'organització de les construccions passen a primer pla, marginant fins i tot els temes d'economia"* (Torres, Llobet, Puig, 1985: 66).

The Plan's main existing qualities are; the invention of a residential fabric with blocks only built on two sides reserving the interior space of the same perimeter for squares, gardens and services as well as pedestrian passageways; leaving open spaces for collective buildings; and providing public parks and parking spaces.

And its main existing defects are; the overall structure with its lack of zoning and industrial areas that were dispersed and mixed with dwellings; the large depth of the building surface; and the excessively close street layout situated at intervals of 100 meters.

*"En 1859 se aprobó el proyecto del ingeniero Cerdá para el nuevo ensanche de la ciudad. Este proyecto es un trazado en cuadrícula (a base de cuadrados de 113 metros de lado) y tiene los defectos capitales de la época que no supo prever la importancia del enorme desarrollo industrial ya entonces iniciado, pero presenta algunas cualidades, como son : a) Las de edificar solamente dos lados del cuadrado de cada manzana. b) Dejar jardines en el gran espacio libre comprendido entre los dos bloques de edificación, así como pasajes para peatones. c) Dejar también espacios libres para edificios de carácter colectivo. d) Haber previsto y emplazado acertadamente un gran eje de la ciudad, paralelo al mar, que es la calle de Cortes. e) Disponer parques públicos y espacios para estacionamiento.*

*Constituyen graves equivocaciones del trazado de Cerdá: a) La falta absoluta de clasificación por zonas. b) La poca importancia dada a la industria, para la cual solo prevé emplazamientos muy reducidos y dispersos, mezclándola con la habitación. c) La excesiva profundidad de la superficie edificable de las zonas de viviendas (28 metros en dirección normal a la calle), lo cual obliga a ventilar por patinejos. d) El trazado de vías excesivamente próximas explicable solamente para vehículos de tracción animal. e) El*

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<sup>58</sup> The Macià Plan was drafted in 1932 by Josep Lluís Sert and Le Corbusier and presented in an Exposition in the subsoil of Plaza Catalunya on the 11<sup>th</sup> of June 1934 under the title 'La Nova Barcelona'. It consisted of a program for the sanitizing the old town, revising and improving the Eixample, dividing the capital into districts and linking the city with the peripheries and the Llobregat coastal plain. As pointed out by Roca the GATCPAC's plan was a global theoretical alternative to the policy of the Gross-Barcelona, in other words it criticized the model and legal framework of the Gross-Barcelona: *"El GATCPAC realitzà una crítica formalment d'una gran duresa a la política urbana dominant. De les idees per a un pla d'Infraestructures viàries i localització del terciari de Jaussely i del sistema de verd urbà que el complementa..."* a base de línies radials...y la classificació en zones (es) inexistent..." (GATCPAC, 1932)" (Roca, 1977: 27).

*desplazamiento del eje normal al mar hacia el Besós. Los centros urbanos raramente se desplazan; para que esto tenga lugar, tiene que intervenir alguna causa exterior. En medio de todos sus defectos, es preferible el proyecto de Cerdà, a otros de base más romántica, de su misma época” (GATEPAC, 1934: 14).*

The GATCPAC argued that private interests were more important than public and collective ones providing more revenue and income to landowners. If Cerdà's Plan was respected, the Eixample would not have faced problems; constructions inside the blocks would not be permitted; public gardens and pedestrian streets would not be eliminated, and the blocks would not be enclosed on all four sides and increased in height and depth worsening the living conditions and preventing sunlight and ventilation:

*“Los jardines públicos también se han eliminado. Se ha permitido asimismo, la construcción en planta baja de la manzana en la totalidad de su superficie; las zonas verdes que deberían existir entre los bloques no aparecen por ningún lado; éstos, que sólo debían construirse en dos lados del cuadrado, ocupan actualmente los cuatro, lo cual empeora las condiciones de las viviendas, privando a algunas del sol y no dejando circular el aire. Los ángulos del cuadrado son de difícil solución y la excesiva profundidad de las construcciones (28 m.), obliga a emplear patinejos de ventilación, siendo las menos las habitaciones que ventilan al exterior. Se han suprimido también los pasajes para peatones que establecían un principio de clasificación de tráfico” (GATEPAC, 1934: 16).*

Therefore, they proposed limiting the ensanche especially where industries and housings are mixed. For that, they worked on a Zoning plan that separated work from living areas by first, moving the main industries to Zona Franca and Besòs area, and second, by placing green spaces around dwellings for more protection and isolation from the industries' noise and pollution. Moreover, in Sant Andreu they built the 'Casa Bloc' a high-density worker's block resident, they created a new model for the unbuilt areas of Poblenou and Sant Martí, and connected Barcelona to the sea. A new, large grid was proposed to restructure a layout that would include open construction according to the principle of the Le Corbusier's 'Ville Radieuse'. The suggested super grid consisted of streets, divided into highways and pedestrian roads, and included open construction with hygienic characteristics.

The Eixample will be linked to the new neighborhoods with 400x400m block or “super manzanas”, instead of the 113x113m, that organized construction without interior patios and height. They provided by that a better quality of life with their collective services, public spaces, gardens, squares, greenery, ventilation and light. On the basis of this module, the district produces six groups of row houses with narrow façades, comprising a ground floor and two storeys and it produced a density of over 60 dwellings per hectare. *“El nuevo trazado se enlaza con el viejo, de la siguiente forma: de cada tres vías actuales paralelas al mar, una se continúa, las otras dos encuentran una gran colectora en el límite que se fija al trazado actual” (GATEPAC, 1934: 17).*

Meanwhile, they also planned the Recreation and Holiday Resort ‘Ciudad de Reposo’ for Barcelona’s coast. However, most of the projects were put on hold with the eruption of the Civil War<sup>59</sup> (1936-1939):

*“El Pla Macià, com a totalitat, mai no tingué estatut legal, per raons gairebé òbvies, donada la debilitat administrativa i política de la Generalitat de Catalunya i la suspensió que l’afectà d’octubre del 1934 a febrer del 1936. Però alguns dels elements fonamentals del Pla Macià (la Casa-Bloc, la Cooperativa de la Ciutat [Obrera] de Repòs i de Vacances, el sanejament de la ciutat antiga) foren recolzats i/o adoptats per la conselleria de la Generalitat, que hi esmerçaren una part dels seus esquàlids recursos financers”* (Roca, 1977: 25,26).



Fig. 55 Le Corbusier and GATCPAC’s 400x400 module linked with Cerdà’s Plan (Torres i Capell, 1999: 145).

<sup>59</sup> The Casa Bloc in Sant Andreu de Palomar was actually carried out.

## New Park System for a New City

In the context of Jaussely's Plan and the densification of the Eixample, the City Council initiated a policy of buying land for the creation parks acquiring plots in Montjuïc, Guinardó, Vallvidrera, and at the foot of Tibidabo. Barcelona had passed from having one park that of Ciutadella with a surface of 310,000m<sup>2</sup> (31h) in 1900 to having 718,034m<sup>2</sup> (72h) in 1910 (Casals, 1997).

The landscape architect Jean Claude Forestier<sup>60</sup> after meeting architect Nicolau Maria Rubió i Tudurí in 1915 began the planning and execution of a park system and open spaces that were *"necessary both to alleviate the ills of the industrial city and to further embellish it"* (Busquets, 2005: 216), and prepared it for the 1929 Universal Exposition<sup>61</sup> that was used as an instrument of urban policy (Solà-Morales I., 1976).

Forestier during his stay in Barcelona between 1915 and 1923<sup>62</sup> along with his disciple Rubió i Tudurí director of the 'Dirección de Parques y Jardines' (Department Parks and Gardens) between 1917 and 1937<sup>63</sup>, influenced to a great extent the policy of the creation of green spaces in the city, and the latter particularly described Forestier's contributions:

*"Les aportacions de Forestier a la nostra jardineria foren moltes. En l'aspect formal desterrà els antiquats parterres sobreelevats, [...] reintroduí la geometria senzilla dels nostres vells vergers així com les terrasses unides per escales. Quant a plantes, n'introduí una infinitat, enriquint considerablement, meravellosament, la nostra flora hortícola"* (Rubió i Tudurí, 1982: 17).

Casals stated that Forestier formulated the first park system according to the city scale developing entire sectors of the city.

*"adquirió mayor transcendencia al hacer extensiva su labor a una serie de propuestas urbanísticas a escala de ciudad, que incluían aspectos diversos como la modernización del Servicio de Parques y Jardines municipal, la formulación de la primera propuesta operativa del sistema de parques, o proyectos de desarrollo urbano para todo un sector de la ciudad entorno del proyectado parque del Palacio Real de Pedralbes. Aunque algunos de ellos no llegaron a concretarse y otros lo hicieron de la mano de algunos de sus discípulos catalanes,*

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<sup>60</sup> Jean Claude Nicolas Forestier French landscape architect, author of *"Grandes villes et systemes de Parcs"* (1908) and conservateur of the promenades of Paris. He worked on the park system in Barcelona between 1915 and 1923 with Rubió i Tudurí and then returned in 1929 shortly before the Universal Exposition. He also worked in Buenos Aires, La Habana, Rabat, and Sevilla where he designed Maria Luisa Park for the 1929 Iberomamericana Exposition.

<sup>61</sup> In 1915 the original project of the Electric Industries Exposition, advocated by Joan Pich i Pon, changed and became a Universal Exposition thanks to Francesc Cambó and his friends of the Lliga Regionalista (Rubió i Tudurí, 1982).

<sup>62</sup> Forestier left Barcelona after the coup d'état de Primo de Rivera and, after the insistence of Rubió i Tudurí, came back in 1929 just before the Exposition. He died in 1930 in Paris.

<sup>63</sup> He was exiled to France and came back in 1947.



*las ideas del ingeniero francés marcaron la historia urbana de la ciudad y su nombre quedó vinculado a uno de sus grandes parques, Montjuïc” (2009: 296).*

Forestier and Rubió i Tuduri collaborated in creating important parks in the city beginning in Montjuïc with the Parc Lariba (1909-1916), Guinardó park (1916), and other gardens in Montjuïc (1915-1923) including Plaça del Polvorí Vell (1917), Font del Gat (1917), Plaça Mecànica (1919), Jardins de Tir al Colom (1920), Jardins del Teatre (1922), and Jardins del Miramar (1919-1923).

Before Rubió i Tuduri began the restoration of Ciutadella<sup>64</sup> park between 1921 and 1927, he worked with Forestier on Plaça d’Armes in Ciutadella (1921) located in front of the Museu d’Art de Catalunya which nowadays is Catalunya’s Parliament.

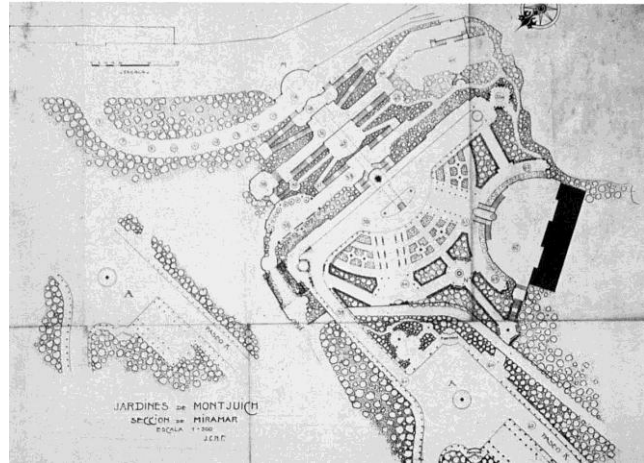
In addition to that, Forestier in 1923, landscaped the Exposition’s main avenue from Plaça d’Espanya until the Palacio Nacional (nowadays known as Avinguda de la Reina Maria Cristina), starting from Puig i Cadafalch’s design (Torres, Llobet, Puig, 1985), and some private gardens like that of Marquès d’Alella.

In designing their parks and gardens they aimed to create different atmospheres in every space. They paid closed attention to the kind of materials used for the pavements, murals, and other elements in their space, and studied construction details and drainage focusing on the importance and wellbeing of vegetation and trees. They designed gardens with pathways and stairways that give different perspectives and visual qualities complemented with fountains, benches and built-in seating. Forestier (1920) described the importance of drainage, and paving materials used in preserving gardens and enhancing their permeability:

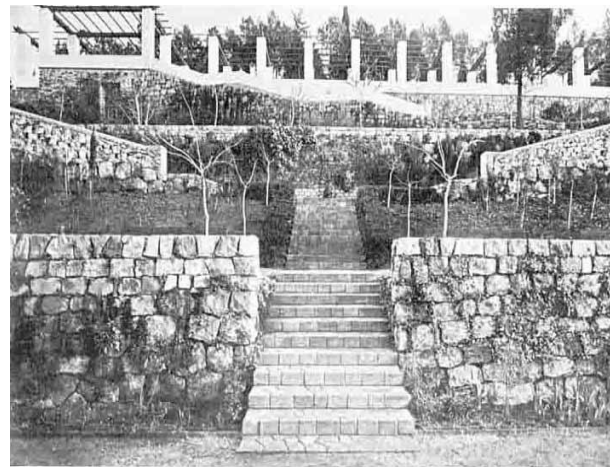
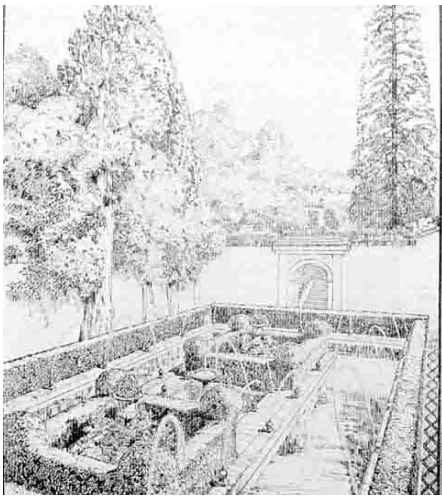
*“Les allées d’un jardin doivent être nettes et propres en tout temps, agréables au pied et, autant que possible, saines et sèches malgré l’humidité ou après des pluies récentes. L’usage en France est de les faire aussi fermes que possible, soit en les asseyant sur des couches de gravois, de plâtras, de mâchefer ou de cailloux pilonnés, soit en les formant avec des débris, poussières ou recoupes de pierres provenant des carrières, ou tous autres matériaux susceptibles de les rendre à la fois solides et perméables. Elles sont recouvertes ensuite de sable, de gravier plus ou moins fin que draine la surface” (Forestier, 1920: 229).*

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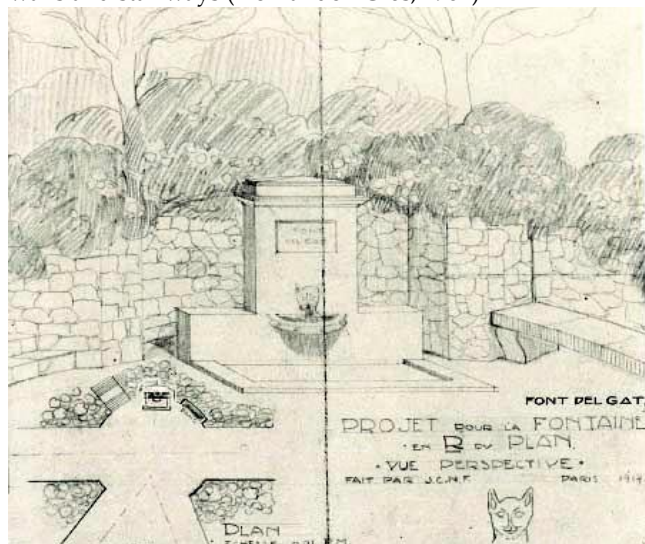
<sup>64</sup> The Ciutadella park, designed by Josep Fontserè for the 1888 Universal Exposition, was being renovated between 1921-1927 due to its deterioration and abandonment since the Expo.



**Fig. 56** Plan of Parc Laribal (1916) (Magrinyà, Marzá, 2009) and Plan of Jardines del Miramar (Hernández-Cros, 1982) showing the morphology of the parks with their designs, pathways and atmospheres.



**Fig. 57** Parc Laribal "Generalife" and Parc Laribal walls and stairways (Hernández-Cros, 1982)



**Fig. 58** A view in Montjuïc (Hernández-Cros, 1982) and Fuente del Gat (1917) (Magrinyà, Marzá, 2009)

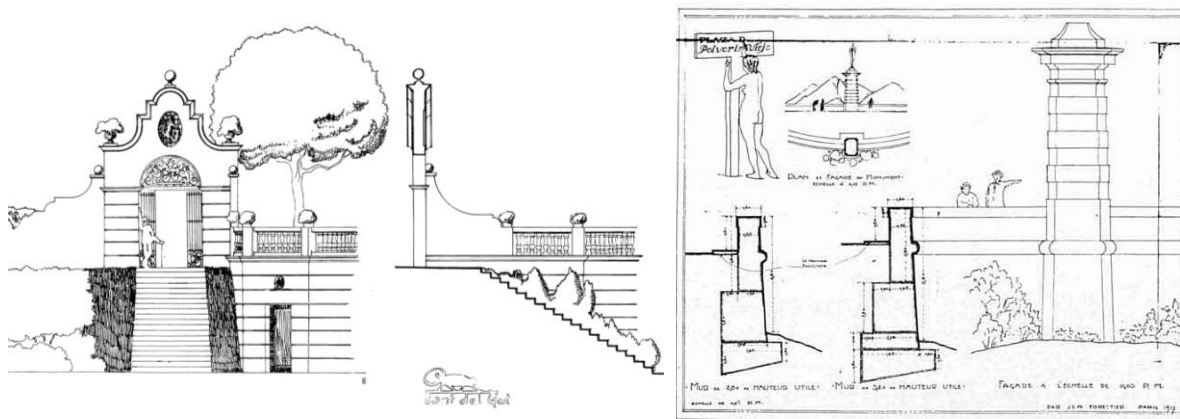


Fig. 59 Drawing details of Font del Gat and Polvorí Vell (Hernández-Cros, 1982)

Rubió i Tudurí after Forestier created his own series of parks and squares through the 'Dirección de Parques y Jardines' (formerly known as 'Servicio de Jardines y Arbolado') while collaborating with other municipal services.

The policy of acquiring land to create parks and system was still in motion and by 1924 the free land had multiplied by six from a total of 72 hectares to 450 (Busquets, 2005).

Rubió i Tudurí's ideas were inspired by Jaussely's plan and the theories of Cebrià de Montoliu's<sup>65</sup> *Ciencia Cívica* (Civic Science), as well as Ebenezer Howard's theories of *Garden Cities of Tomorrow* (1898), but mostly adapting what he learned from his 'maestro' Forestier (Casals, 1997).

On discussing Rubió i Tudurí's book "Jardin Meridional", Bru (1982) wrote that even though Rubió i Tudurí was an admirer of Le Nôtre, he preferred a native tradition in his designs established in the Hispanic-Arab roots like 'El Generalife' in Granada and Alcázar in Sevilla, and can be summarized in his: unappreciation of mixed gardens; use of bushes and trees in organizing the masses and pathways of gardens; use of a small range of species evenly arranged; discreet use of flowers grouped according to their color; careful placement of pots to highlight certain sequences; placement of aromatic plants to create certain settings as in the Hispanic-Arab style; and his preference for native species that does not exclude the use of foreign and exotic ones.

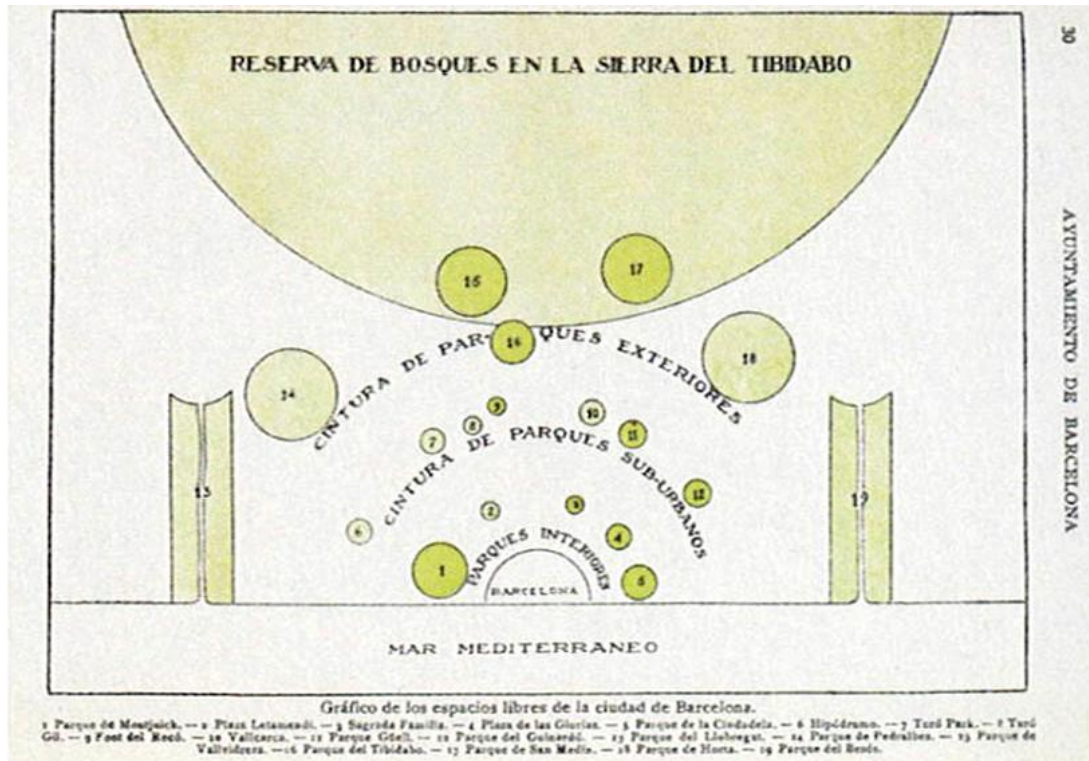
Preoccupied with hygiene and the citizens' quality of life, he formulated in his text *El problema de los espacios libres* (1926-1927) mentioned earlier, a concentric layout structure formed by a gradation of:

First, small-scale interior parks at the scale of the neighborhood, "*squares y jardines de barrio*", accessible to all inhabitants at a distance less than 500 meters; second, a belt of larger suburban parks (8 to 10 hectares minimum) accessible to inhabitants living in their

<sup>65</sup> Cebrià de Montoliu was the promoter of the Civic Science theories in Catalonia, a follower of Ebenezer Howard, Patrick Geddes and Raymond Unwin, and founder of the 'Sociedad Cívica La Ciudad Jardín' in 1912.



vicinity; third, an outer belt large scale exterior parks located in the periphery away from the inhabitants by half an hour in public transportation; and fourth, complemented by a picturesque forest reserve, “*reservas de paisajes*”, as in the natural reserve of Tibidabo forest. All these free spaces are united by means of avenues-gardens that facilitate their access to all citizens.



**Fig. 60** Rubió i Tudurí’s arrangement of parks in the city from the small-scale to the forest reserves (Magrinyà, Marzá, 2009)

He created Font del Racó (1926) park in Tibidabo, and Palau de Pedralbes (1926), Plaça Francesc Macià (1928), and Turó Park (1929-1934) during the prolongation of Avinguda Diagonal until the Palau Reial in 1924. While working on Plaça d’Armes (1921) he continued his restoration of Ciutadella (1921-1927). He also helped in landscaping and embellishing Plaça Catalunya (1927) collaborating with the technical service director José Cabestany.

As for the small-scale squares or “*squares y jardines de barrio*” as he called them, he landscaped the small gardens of the upper part of Passeig Sant Joan (1930), as well as Plaça Letamendi (1928), Jardins Reina Victòria (1921); the gardens of Plaça de la Sagrada Família (1928); Plaça Sanllehy (1929), Jardinetes de Gràcia (1929) (nowadays Jardinetes de Salvador Espriu) (1929), Plaça d’Adrià (1930), and Plaça Berenguer el Gran which will be discussed further on. Moreover, he designed several private gardens like Jardins de Tamarita in Sant Gervasi which nowadays opened to the public at certain hours.

To Rubió i Tudurí, “squares y jardines de barrio” are indispensable especially for children and old people, and they should satisfy the inhabitants needs, provide comfort, tranquility, fresh air, and light. Their disposition must follow the structure of their surrounding buildings. They should be placed close to circulation roads but in no way next to them to prevent noise, dust, and odors, among others, and to preserve the city’s aieration, sunlight, and public hygiene.

Within these small-scale squares and gardens, Rubió i Tudurí (1917) proposed to install benches, fountains, trees, greenery, and sand boxes as in Plaça Sanllehy, and Plaça Berenguer el Gran, among others. He also promoted the creation of children’s playgrounds “jardines infantiles” like in Jardins Reina Victòria, Plaça d’Adrià, and the garden of Principe de Asturias in front of the Hospital Clinic. To him children’s playgrounds were of great importance for their hygienic and social action:

*“En el desarrollo de estos planes hay que conceder la más alta importancia a la creación de lugares destinados exclusivamente a la infancia y a los juegos de la juventud. No basta construir parques públicos y destinar en ellos alguna avenida y algunos bancos a los niños, como cosa accesoria: modernamente ha llegado a comprenderse que la acción social e higiénica encomendada a los jardines y espacios libres de las grandes ciudades logra su máximo efecto al ejercerse sobre la infancia y la juventud”* (Rubió i Tudurí, 1917).

**Fig. 61** Jardins  
Reina Victòria  
(Domínguez, 1930.  
AFB)







**Fig. 62** Plaça  
Sagrada Família  
(Martí, 1933-35.  
AFB)

### **3** INTERIOR REFORM OF THE OLD TOWN

### **Early Intents of Urban Hygiene and creation of small-scale public spaces**

The old town had been subject to repeated urban interventions, demolitions, transformations, plans, projects, reform etc. throughout its history that helped in evolving, shaping or changing its morphology and public spaces.

The population growth that Barcelona experienced during the first decades of the 19<sup>th</sup> century led to a sharp increase in population density that aggravated the city's health situation resulting in epidemic outbreaks of yellow fever and cholera. These problems raised concerns and urban hygiene awareness. Monlau's (1841, 1847) and Cerdà's (1855, 1859) descriptions of the old town pushed for solutions and made the interior reform indispensable.

As a matter of fact, in Barcelona, –and Spain in general– one of the first intents of urban 'higienización' that gave way to the creation of public spaces was the exhumation of cemeteries. In the 18<sup>th</sup> century, the costume of burials inside the church or in cemeteries next to it led to intense debates involving hygiene problems<sup>66</sup>. Similar debates were held in Spain and around 1773 Carlos III issued a Royal Decree imposing the construction of cemeteries. For the sake of health, he prohibited burial grounds next to churches and hospitals –with the opposition of the church– for the purpose of converting them into public squares.

*“La oposición de la iglesia a esta norma hizo difícil la aplicación de la medida, aunque desde comienzos del siglo XIX, y luego tras la guerra de la independencia, se impuso de forma general. La situación en casos de epidemias, cuando había que enterrar centenares de*

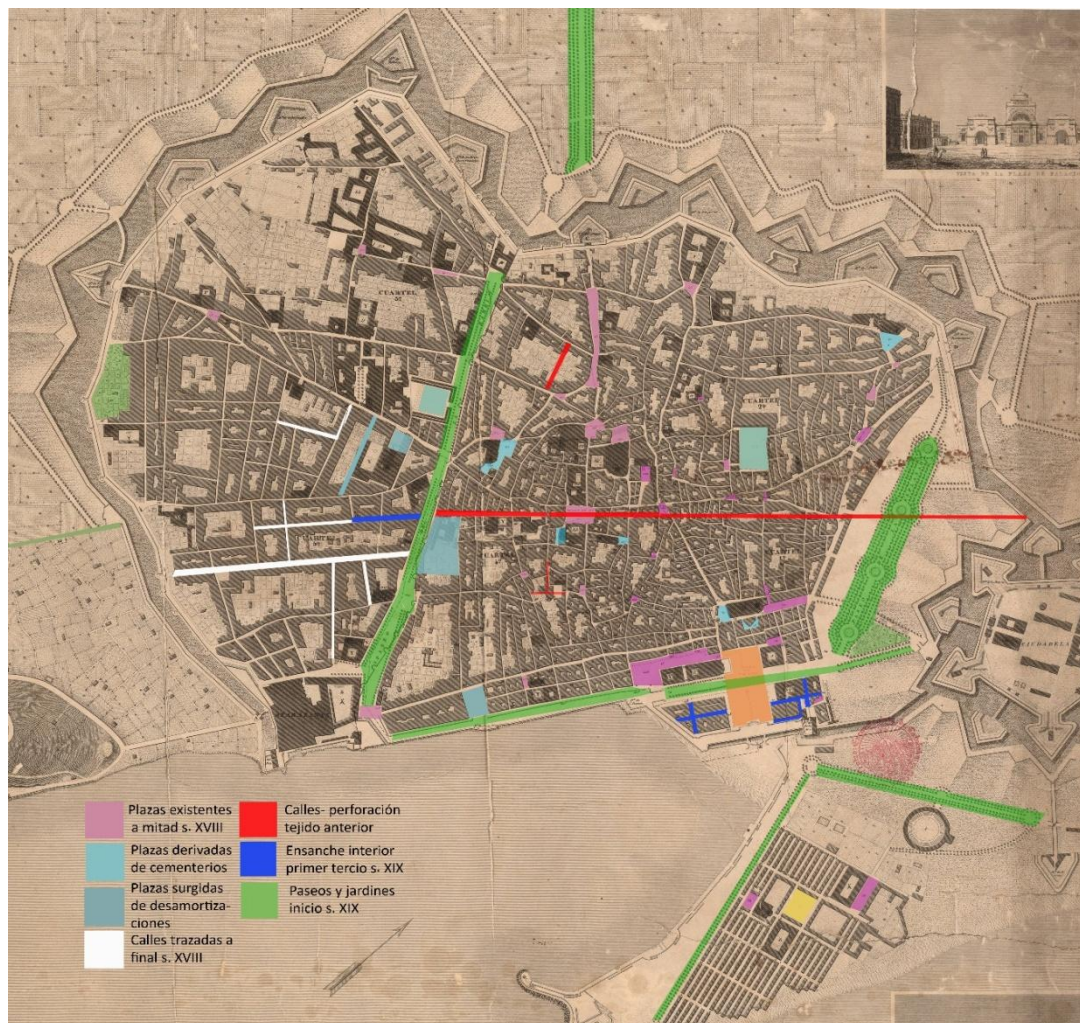
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<sup>66</sup> Capel stated that it was common that: *“En las ciudades antiguas era normal enterrar a los difuntos fuera de la ciudad [...] Pero desde la antigüedad tardía las iglesias empezaron a convertirse en lugar de enterramiento de los fieles cristianos, proceso que, como hemos visto se acentuó en la edad media, cuando los catedrales tuvieron un papel importante en «la penetración de los muertos en la ciudad».”*(Capel, 2006 : 381)

*cadáveres improvisando lugares cercados con espinos en las afueras de las ciudades, hizo indispensable su creación” (Capel, 2006: 381).*

After 1785 many more official regulations concerning cemetery laws and policies were issued.

*“Desde el comienzo del presente siglo, las disposiciones oficiales han sido muchas, porque muchas son también, y muy delicadas, las conexiones de este ramo. Los cementerios, en efecto, tienen, a los ojos de la Administración, el doble carácter de sitios sagrados, o bendecidos por la Iglesia, y sitios insalubres, o mefitizados por las emanaciones cadavéricas; y mientras la potestad eclesiástica y la civil no se pongan de cabal acuerdo, no podrá haber legislación acertada, y observada, sobre cementerios” (Monlau, 1862c: 1432, 1433)*



**Fig. 63** Streets, squares, pathways and gardens of Barcelona in the early 19th century. Elaboration of A. Remesar on the cartographic base of Josep Mas Vila's *Plano Geométrico de Barcelona* in 1840 (Remesar, 2017. Mas Vila, 1840. AMCB)

Later in 1804, Carlos IV adopted further measures to enable the construction of cemeteries outside the urban precincts and away from populated areas<sup>67</sup>. This issue was important because it facilitated and gave way to many of the public spaces that exists nowadays. However, due to several circumstances it wasn't until the early and mid 19<sup>th</sup> century that the regulation of exhuming all cemeteries was carried out. The final push to suppress parish cemeteries and turn them into squares was ordered by the military authority without exceptions given on March 12, 1816: *"se empiedren isntàntaneament todos los cementerios que existen dentro esta ciudad rebajando en un momento todos los que hay elevados"* (Fabre, Huertas, 1988: 64).

Between 1816-1820 and 1850-1870 almost all Spanish cities launched the construction of extra-mural cemeteries and the removal of existing ones that gave way to open spaces and squares. In some cases and after laborious negotiations parts of the cemeteries were granted back to parishes to extend their dependencies (Fabre, Huertas, 1988). This gave Barcelona a large part of its small-scale squares, for example, in 1817 the cemetery of Santa Maria del Pi gave way to Plaça de Sant Josep Oriol near the already existing Plaça del Pi and the parish was built in the plot in between.

The parish of Santa Maria del Mar agreed with the City Council to suppress the cemeteries around it created on its one side Plaça de Santa Maria del Mar in 1806, and on its other side the Fossar de les Moreres in 1816 that served as a memorial to the victims of 1714 buried there. It passed through several stages before getting regenerated in 1989.

As for Plaça Sant Felip Neri (1790), it was created after removing the Montjuïc del Bisbe cemetery where one part was used for the square and the other to build the church of Sant Felip Neri<sup>68</sup>. The square changed after being partially destroyed during the Civil War and in 1938 was regenerated by Adolf Florensa.

In 1821 the disappearance of Sant Llàtzer hospital cemetery allowed the expansion of Plaça del Pedró that had served until then as a crossroad between Carrer de l'Hospital and Carrer del Carme. It has always been a symbolic square since it holds one of the oldest public arts in the city, the fountain and sculpture of the patron Saint of the city 'Font de Santa Eulàlia' (Fabre, Huertas, 2004. Art públic), which since its existence since the 17<sup>th</sup> century it passed through several changes and challenges until it was partially destroyed in 1936 during the Civil War and reconstructed in 1951 and later in 1997.

Several other squares replaced cemeteries like Plaça Sant Just (1816), Plaça Sant Miquel (1870), Plaça Sant Pere de les Puel·les (1816), among others (Fabre, Huertas, 1988; Capel, 2006; García Sanchez, 2003). *"Casi todas las pequeñas plazas que introducen un poco de luz y de aire en la parte antigua se deben a la ley que suprimió los cementerios parroquiales"* (Florensa, 1957: 12).

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<sup>67</sup> Around that time, in 1775, the cemetery of Poble Nou was inaugurated as a substitution to the ones in the churches and convents, and in 1821 it became the municipal cemetery. In 1881 the second municipal cemetery was inaugurated in Montjuïc.

<sup>68</sup> Both squares, Fossar de les Moreres and Plaça Sant Felip Neri, will be discussed later in the thesis.





**Fig. 65** View of Plaça del Pedró with Santa Eulàlia memorial and fountain dating back to 1673 making it one of the oldest public art (Pérez de Rozas, 1957-1967. AFB)



**Fig. 64** Drawing of Plaça de Sant Just with the fountain and part of the church (Febrés Yll, 1893. AHCB)



**Fig. 66** Perspective drawing from Plaça del Born showing the old bridge (before being destroyed) of Fossar de les Moreres connected to Santa Maria del Mar (Buyé Muntané, 1930. AHCB)

The second intent of creating public spaces was taking advantage of the confiscation of ecclesiastic assets and the burning of convents (at least in Barcelona).

In many Catholic countries the ecclesiastic confiscation happened in the 19<sup>th</sup> century following the implantation of the liberal regime. In Spain several confiscations took place throughout the century –that had effects on political, social, and urban aspects – from the French occupation (1808-1814) and the Triennio Liberal (1820-1823) to Álvarez Mendizábal's Act (1834-1837) and the burning of convents in 1835. Capel included several other historical reasons like "*la de las temporalidades de los jesuitas en 1767[...]; la de Godoy en 1805; [...] y Espartero (1841)*" (Capel, 2006: 283), and Fabre and Huertas (1988) added to them the September revolution in 1868 and the Semana Tràgica or tragic week in 1909 where 18 churches and 49 convents and religious centers or colleges were burned down. The confiscation of 1834 made possible the expropriation and sale of the monastic's assets though it was a complicated procedure due to the civil war.

In that time the church had accumulated vast landholdings and urban properties through donations of various kinds that almost reached half or more of the buildings in the city. The confiscation and selling of those caused a great impact on the assets themselves as well as on the urban space and the city. Due to that many plots and spaces became available and the old town was remodeled with new buildings, streets and squares:

*“Las propiedades en manos del clero regular y secular podían llegar a la mitad o más de los edificios de la ciudad. La desamortización permitió un amplio cambio en la propiedad urbana, ya que las tres cuartas partes de los compradores adquirió una sola casa, y proporciono espacios para remodelar el centro de las ciudades abriendo calles y plazas y construyendo nuevos edificios de viviendas en el casco urbano, de mayor altura y densidad” (Capel, 2006: 283, 284)*

In Barcelona’s old town the majority of properties belonged to the Catholic Church which formed 20% of the urban area (Fabre, Huertas, 1988). The confiscation, destruction and disappearance of convents, churches, cemeteries, and religious colleges gave way to many streets, squares, markets, and public and private buildings.

Confiscation of ecclesiastic assets took place in all cities and in Barcelona it had an important impact on its old town especially in the Raval. In 1835, the monastic orders were accused of helping the Carlists during the Carlist War which lead to populous riots and the burning down of many convents. Therefore, the Royal Decree of January 25, 1836 and of July 29, 1837 authorized the public utility of those confiscated assets and destroyed convents.

Between 1835 and 1844 eight convents were demolished in the city and thirteen others followed by the end of the century leaving vast vacant plots and spaces. It was during this time that Alvarez Mendizábal’s Act (1835-1837) changed the use of monastic and ecclesiastic land and the first ‘Ley de Expropiación Forzosa’ (Law of Eminent Domain) was sanctioned in 1836 authorizing their expropriation and designation for public places (Busquets, 2005; Capel, 2006). After returning from exile and becoming the Minister of Finance Mendizábal continued what the French and the Triennio Liberal had “timidly” started (Fabre, Huertas, 1988).

*“En Madrid, la de José Bonaparte permitió expropiar ya cinco conventos e iglesias para abrir plazas; y la de Mendizábal hizo posible que el casco urbano fuera ampliamente remodelado. En Barcelona su impacto fue también muy importante, ya que permitió obtener amplios espacios centrales que se dedicaron a diversos usos. Entre 1835 y 1844 se demolieron en Barcelona ocho conventos, a los que se unieron otros 13 antes de fin de siglo. Entre otros, se desamortizo el convento de San Francisco y en una parte del mismo, que había sido cedida por el duque de Medinaceli, se construyo la plaza de su nombre; la plaza de Antonio López de Barcelona surgió sobre el solar del convento y plaza de San Sebastián, derribado en 1919. La desamortización afectó profundamente el Raval de Barcelona. La destrucción del convento del Carmen permitió construir las calles Fortuny, Notariado y Doctor Dou; el derribo de otros hizo posible construir mercados, y disponer de cuarteles (y en algún caso de edificios para la industria)” (Capel, 2006: 284).*



**Fig. 67** Burning of convents and churches on the night of July 23, 1835 (Furnó, 1835. AHCB) (Tusquets, 1932)

And as such Plaça de Sant Jaume (1820-1823) replaced Sant Jaume Church, a small cemetery, as well as the General Mayor's Office. Plaça Reial replaced the Capuchin convent of Santa Madrona that was first confiscated and demolished in 1822 during the Triennio Liberal. Later the Capuchin retook the plot and rebuilt a new one between 1824 and 1829 until finally it was burned down in 1835 and dismantled in 1848 to start the long process of the square's construction.

Plaça de Duque de Medinaceli replaced Sant Francesc d'Assís convent burned in 1835 and confiscated in 1838. In 1857, Plaça Sant Agustí was created in the orchard of convent Sant Agustí Vell burned in 1835 and confiscated in 1836.

Plaça d'Antoni López replaced Sant Sebastià church that was demolished in 1868. Santa Caterina market replaced the Dominican convent that was partially demolished in 1823 and totally destroyed along with its church in 1837. The Boqueria market replaced Sant Josep monastery in 1835 and, in 1885, the land allocated to the market was extended to the site of the demolished convent Santa Maria de Jerusalem giving way to the current Plaça de la Gardunya.

Many squares that originated from confiscated monastic property were not created or urbanized until many years later. Among them, the Paül convents where the first, located in Carrer dels Tallers in 1704, was converted by the French and the Triennio Liberal into a military hospital. It was destroyed in the 40s –with the opening of Vall d'Hebron hospital– and replaced by Plaça de Castella in 1946. A second Paül convent was built in 1833 next to the walls of Sant Pau, and in 1839, after the burnings and confiscations, it was converted into a prison. In 1936, during the Civil War, the prison was totally destroyed and the plot remained empty until the time of Mayor Porcioles where it was converted in 1957 into Plaça de J. M. Folch i Torres (Fabre, Huertas, 2004. Artpúblic).



The convent of Bonsuccés burned in 1835 was dismantled during the Civil War and remained empty until it was replaced, in 1957, by a porched building and a square known as Plaça Vicenç Martorell Otxet. As for the convent de la Mercè, it was abolished by the Trienni Liberal in 1823 before being totally confiscated and converted in 1846 into the 'capitania general'. The convent's orchard was built and recuperated as Plaça de la Mercè in 1983 after more than one century.

These new spaces, whether squares or streets, changed the urban and morphological image of the city, and played an important role in the city's political and social issues: they were the main scenario in all the popular political riots and demonstrations.

Whether through the exhumation of cemeteries, confiscation, or burning of convents, the vacant plots or free spaces were urbanized, built or converted into public spaces that notably improved the life in the historic center: *"En alguns casos els solars van ser urbanizats i edificats. D'altres es van convertir en espais públics, cosa que va millorar notablement les condicions de la vida als nuclis vells de les ciutats"* (Fabre, Huertas, 1988: 55).



**Fig. 68** Plaça Reial (Esplugas Puig, 1880-1889. AFB).



**Fig. 69** Plaça del Duc de Medinaceli (Martí Centelles, 1874. AFB).



**Fig. 70** Plaça d'Antoni López (Oriol, 1930-1935. AFB)



**Fig. 71** Plaça de la Mercè in 1867 overtaken by a building (Rigalt, 1867. RACBA)

Current space	Original space	Date of construction	Date of destruction	Date of current space
<b>1. Plaça Reial</b>	Caputxins Convent	19 <sup>th</sup> century replacing older 18 <sup>th</sup> century	1822 old convent demolished /1835 new one burned	1848 / renovated in 1950s
<b>2. Plaça de Sant Jaume</b>	Church-Cemetery of Sant Jaume	Romanic origin 14 <sup>th</sup> century	1823 demolished	1823 / repaved by Florensa in 1950s
<b>3. Plaça de Sant Agustí</b>	Sant Agustí Vell Convent / orchard	18 <sup>th</sup> century	1835 burned / 1836 demolished	1857 orchard of convent converted into square
<b>4. Plaça del Duc de Medinaceli</b>	Sant Francesc d'Assís Convent	13 <sup>th</sup> -14 <sup>th</sup> centuries	1835 burned / 1838 demolished	1838
<b>5. Plaça d'Antoni Lopez</b>	Sant Sebastià Church	16 <sup>th</sup> century	1868 demolished	1883 / 1943 remodeled
<b>6. Plaça de Sant Miquel</b>	Church- Cemetery of Sant Miquel	Romanic origin 16 <sup>th</sup> century	1869 demolished	1870
<b>7. Plaça de la Gardunya</b> (Extension of Boqueria market)	Santa Maria Jerusalem Convent	14 <sup>th</sup> century	1885 demolished	1885 (remodeled 2014-2015)
<b>8. Plaça Castella</b>	Paüls Convent	18 <sup>th</sup> century 1704	1808 military hospital	1946
<b>9. Plaça J.M Folch i Torres</b>	Paüls Convent	19 <sup>th</sup> century 1833	1835 burned / 1839 prison / 1936 destroyed	1957
<b>10. Plaça Vicenç Martorell</b>	Bonsuccés Convent	17 <sup>th</sup> century	1835 military property / 1936 demolished	1957
<b>11. Plaça de la Mercè</b>	La Mercè Convent / orchard	17 <sup>th</sup> century	1823 supressed / 1835 burned / 1846 Capitanía General	1983 orchard of convent converted into a square
<b>12. Plaça de Sant Felip Neri</b>	Cemetery of Montjuïc del Bisbe		1790 / 1936 destroyed by Civil War	1958 remodeled by Florensa
<b>13. Plaça de Santa Maria del Mar</b>	Cemetery		1806	1806
<b>14. Fossar de les Moreres</b>	Cemetery		1816	1816 / 1989 converted into a square
<b>15. Plaça de Sant Just</b>	Cemetery		1816	1816
<b>16. Plaça de Sant Pere de les Puel·les</b>	Cemetery		1816	1816
<b>17. Plaça de Sant Josep Oriol</b>	Cemetery del Pi		1817	1817
<b>18. Plaça del Pedró</b>	Cemetery of Sant Llàtzer hospital		1821	1821 / renovated several times





5. Urbanization of terrain as a result of the opening of several streets (Torres, Llobet, Puig, 1985; Sagarra, Ferran 1996; Sabaté, 1999).

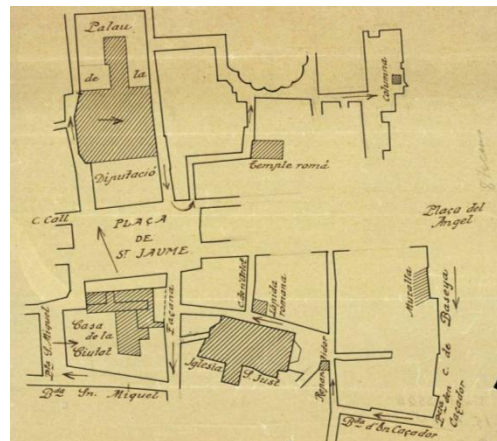
These actions were implemented based on a number of State regulations such as 1846 Real Orden de levantamiento de planos geométricos, but mostly on the provisions issued by the municipal ordinance that, since the 1771 Decreto de Obrería, would constitute a key element of the transformation of the old city. (Sabaté, 1999; López, Grau, 1971; Carreras Candi, 1916)

In the beginning, the city fabric was reformed with specific projects like in the Raval neighborhood in addition to new layout and alignment plans by creating new connections and roads<sup>69</sup>. The most important urban change in the old town was the opening of Carrer Ferran and its surrounding, by Architect Josep Mas i Vila, which took place between 1820 and 1842. It was the first transversal axis opened in the city before this procedure becoming one of the reform policies in the mid 19<sup>th</sup> and early 20<sup>th</sup> centuries (Fabre, Huertas, 1988). Following the opening of Carrer Ferran and several other demolitions, Carrer Jaume I (1849-1853) and later Carrer Princesa (1853) were opened forming along with Carrer Ferran the 'eix transversal' or transversal axis as an attempt to connect the Rambla to Ciutadella (Torres, Llobet, Puig, 1985; Molet i Petit, 2003; Busquets, 2003)

Plaça Sant Jaume, that became the city's new political center was created during that period (1820-1823) and it was Mas i Vila who designed the City Council's (Casa de la Ciudad) new neoclassical façade along with several other façades. After opening up Carrer Ferran, he proposed a series of façades that organized the dwellings behind them and a similar model was applied for Carrer Jaume I and Carrer Princesa.



**Fig. 72** Carrer Princesa (Rigalt, 1867. RACBA)



**Fig. 73** Plan showing Plaça Sant Jaume & Plaça Sant Miquel (Unknown. AHCB)

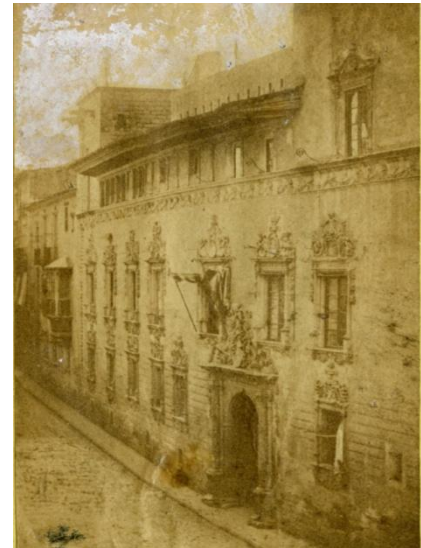
<sup>69</sup> And outside the walls like Passeig de Gracia (1824).

Some of these operations brought on the table the problem of the relationship between the processes of “creative destruction” (Harvey, 2003) inherent in urban transformation and the need for heritage conservation.

*“Entre los monuments gotichs que desapareixen en ares del modernisme de la primera meytat del segle XIX, hi figuren: la façana de Sant Jaume y son historich portxo (1823), los convents y claustres de Sant Francesch ( 1835) y Santa Catarina (1837), la esglesia del Carme (1835), les torres de Canaletes (1854) y lo vellíssim castell Nou Vescomtal (1846). Es també utilisat per quartel lo claustre romanich de Sant Pau. Quan axis actuavan les autoritats ¿que no devian fer los particulars? Los obrers de Sant Just y Pastor aparedaren, en 1816, sa bella façana (novament descoberta en 1884), per montar unes oficines parroquials. Se derrocaren: los banys arabs del carrer dels Banys Nous (1834). les torres del portal de Santa Anna (1856), lo palau Menor o de la Reyna (1858), la casa Gralla (1855 a 1860) y altres edificis” (Carreras Candi, 1916: 842, 843).*



**Fig. 74** Image of Sant Jaume’s archways (LABORDE, 1831. Gallica)



**Fig. 75** Facade of Palau Grall destroyed with the opening of Duque de Victoria street nowadays Carrer del Duc (Unknown, 1856. AFB)

While Cerdà was commissioned to develop a topographic survey and study of Barcelona’s plain, in 1854, Miquel Garriga i Roca was commissioned in surveying the old town, developing an overall alignment project consistent with Spanish legislation, and he produced several exhaustive maps of Barcelona and Barceloneta neighborhood. The most detailed map of Barcelona that was back then was Mas i Vila’s geometric plan drawn in 1842 to scale 1:40000 and another in 1851 to scale 1:1250.

Garriga i Roca started his first mapping tasks in 1856 and from that time until 1862 produced several maps, among them:

- a contour map ‘Plano de Barcelona con el trazado del relieve del terreno y construcción del mismo’ drawn in 1859 to scale 1:1000.



-His most notable works, the fragment plans known as 'Quarterons'<sup>70</sup> drawn between 1858 and 1860 to scale 1:250. They consist of 119 sheets of different sizes and represent on one hand exhaustive and accurate topographic and geographical information, urban parcels, and the state of private and public buildings, and on the other hand it demonstrates a detailed inventory of Barcelona's public elements, streets, squares, courtyards, gardens, fountains, markets, theatres, etc, and it includes major public and religious monuments (Nadal, 2011; Molet i Petit, 2003).

-the 'Plano topográfico-geométrico de la ciudad de Barcelona y proyecto de reforma general' drawn in 1862 to scale 1:2000 and based on the 'Quarterons'. It constitutes the topography of the city, its parcels, and an alignment plan of streets and squares 'Proyecto general de alineaciones y mejoras'. His alignments were systematically applied to almost all the streets except in the Raval. He created new streets and routes that crossed in various ways to connect the major roads in the city like Carrer de la Canuda and Carrer Sant Pere més Baix Street, and Carrer del Pom d'Or and Carrer de la Comtessa de Sobradí in cross-wise direction; and Carrer dels Banys Nous and Carrer de Cucurulla, and Carrer Montalegre and Carrer Jerusalem sea-mountain direction (Sagarra, 1996). Moreover, while respecting monumental buildings like the Cathedral and Santa Maria del Mar, he added a road network independent of the existing streets that passes through the old town and connect the waterfront with new streets planned for the Eixample (Molet i Petit, 2003).

Busquets commented that during that time:

*"Demolition and realignment work has to be understood in the context of the ongoing reform proposed by Miquel Garriga i Roca, who produced an excellent map of Ciutat Vella in 1858 which is a perfect reflection of the situation of the urban fabric of the time. On the basis of this document, in 1892 Garriga proposed his Plan of Alignments and Improvements, which concentrated on correcting the lack of space in the city's historical layout"* (Busquets, 2005: 109, 110).

Garriga i Roca drafted his realignment plan based on Carrer Ferran, as Torres, Llobet, and Puig put it *"perque quan, a la decada dels 50, Miquel Garriga i Roca fa el projecte d'Alineacions i Millores i els Projectes de Boulevard, el que ha passat en el carrer Ferran serveix de model en moltes de les seves propostes"* (1985: 28).

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<sup>70</sup> For more information on the 'Quarterons' check the digitalized reproduction of the maps with visual explanations analyzed under a historical context. This interesting work done by the Arxiu Històric de la Ciutat with the collaboration of the Institut de Cultura de Barcelona and the Ayuntamiento and found in: <http://darreramirada.ajuntament.barcelona.cat/>

Nadal (2011) concluded that Garriga's work gave Barcelona a modern and scientific collection of maps and plans that complemented Cerdà's 1855 Plan of Barcelona and were at the same of level as the maps and plans of major European cities such as Paris, Madrid or Genoa.



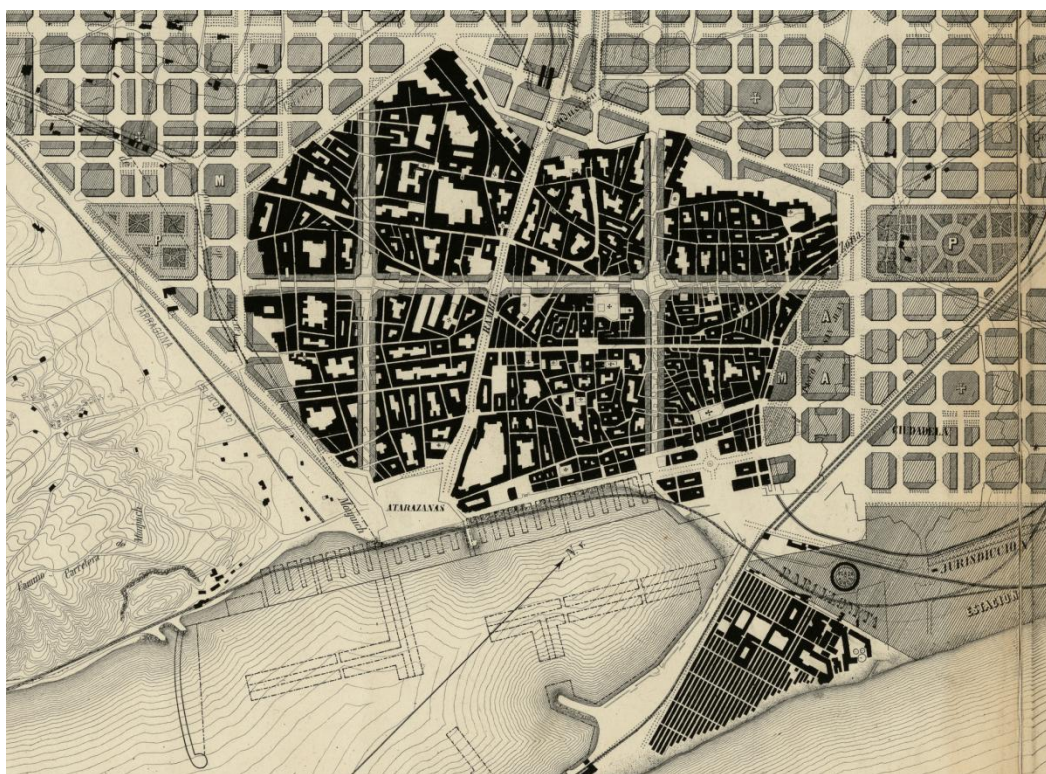
**Fig. 76** Topografic-geometric Plan (Garriga i Roca, 1862.AHCB) and Quarteron no.64 showing the area where now Plaça Vila de Madrid is located (Garriga i Roca, 1858. AHCB)

### Cerdà for the Old Town

In 1854, the decision to demolish the Roman Walls was approved, a process that took several years until 1868. Despite of that, by 1859 the densification, over-population and degradation of living conditions were worsening. Cerdà (1855) (1859), in his studies and analyses saw that the old town suffered from very narrow and irregular streets; lack of alignment and open space; hindered circulation; and difficult flow of air, light and ventilation. There was no space for squares and streets that provide salubrity and quality of life in dense areas and if there was it is by mere coincidence. He was even critical of the existing and newly built spaces and streets like, Carrer Ferran which was unacceptably narrow and irregular, and Plaça Reial was inconvenient and uncomfortable (Puig, 1992). Concerning Ciutat Vella, Cerdà's main concern was the poor circulation, road connection, and way of communication between different neighborhoods in and around the historic center.

*"[...] en todas las poblaciones antiguas no hay grandes vías coordinadas de salubridad según la dirección de los vientos reinantes que ofrecen mejores condiciones higiénicas. No hay vías de convergencia para facilitar las relaciones de todos los barrios con el centro, o con los centros generales de actividad de toda la población, como son: el puerto, las garas de los caminos de hierro, la bolsa, los mercados, ciertos establecimientos industriales, otros de instrucción pública, algunas iglesias, teatros, paseos y jardines públicos, etc. No hay un sistema de vías vecinales para facilitar las relaciones de unos barrios con otro"* (Cerdà, 1859: 404).





**Fig. 77** Cerdà's plan for Ciutat Vella with the three arteries (Cerdà, 1859. AHCB)

For this reason he proposed a plan of interior reform, suggesting the 'eventrement' or 'opening up' the old town and connecting it with the Eixample. He projected three arteries, the first two were perpendicular of direction mountain-sea; one projected from Carrer Pau Claris down to the port –it was carried out 50 years later and became known as the famous Vía Laietana– and the other projected from Carrer Muntaner down to García Morato Avenue (currently known as Avinguda de les Drassanes) and Plaça Portal de la Pau. The third one was transversal linking Montjuïc to the Ciutadella, linking Carrer Marquès de Campo Sagrado to Carrer Pallars, passing through Plaça Nova and Santa Caterina Market and opening up between the latters the so called Avinguda de la Catedral. These streets were 20 meters wide and broadened to 30 meters at their entrances and junctions (Martorell, Florensa, Martorell, 1970). Moreover, he proposed to destroy the walls facing the port and create a dock and a special space between the port and buildings for mercantile, cargo and port services.

Cerdà opened these arteries based on a hygienist perspective according to the circulation and flow of the salubrious winds which in return provided light, air, health, well-being and wealth to the whole population.

*“La abertura de estas grandes vías al través de la Ciudad Antigua según las direcciones de la circulación y de los vientos más saludables, proporcionara ancho paso a la luz, al aire, a los hombres y a las mercancías, y traerá la salubridad, el bien estar y la riqueza a toda la población. Aumentando la prosperidad en todos los barrios para los cuales la mala*

*disposición de las calles es hoy día una barrera para el Comercio y la circulación, vendrá a compensar e indemnizarles de los daños que han sufrido algunos de ellos con la disminución del tránsito que han experimentado las carreteras a causa de los caminos de hierro y por el establecimiento de las garas en puntos que han venido a operar un cambio en la dirección del movimiento interior de la Ciudad” (Cerdà, 1859: 406).*

However, even though Cerdà's view in restructuring Ciutat Vella is to improve the living standards of the working classes, this part of his project was never executed due to various reasons. First the strong opposition of owners due to the expropriation of their property and the absence of an adequate legislation until 1879 when the second bylaw of eminent domain was passed; second, the amount of destruction the axes caused without showing any concern for monumental buildings; third, the 1888 Universal Exposition that left the City Council weak and indebted; and fourth, the political framework and delay in aggregating all neighboring municipalities<sup>71</sup> (Nicolau, Fuster, Venteo, 2001; Busquets, 2003; Tatjer, 1998; Còcola, 2010).

### **Developing Cerdà's Interior Reform Plan. Plan Baixeras**

The development of the Eixample spurred controversy and was pressured from different groups to tailor the project to fit their interests. This was also applied to the Proyecto de Reforma Interior.

In 1879 the Government (R.O. 10 January, 1879) issued a series of regulations aiming to promoting the reform works within large urban areas. Under this Orden, Àngel Baixeras presented a reform project for Barcelona's old city. The city council only adopted it in 1881.

*“Como no podía menos de suceder, en asuntos de tamaño importancia, si bien todos los que informan se hallan de común acuerdo en la necesidad de la reforma, el proyecto despertó desde sus comienzos una lucha de encontrados intereses que ha dado por resultado la formación de un muy voluminoso expediente; circunstancia que, si bien ha retardado el despacho de tan importante asunto, permite hoy resolverlo con entero conocimiento de causa” (Gaceta de Madrid, 1887-04-16:129).*

This excerpt alluded to the pressure endured by the City Council in order to derogate the Baixeras project:

*“Los señores Rius y Taulet y Travila han visitado esta tarde al señor ministro de la Guerra pasando luego al ministerio de Gobernación para ultimar el tan importante asunto de la reforma interior de Barcelona. Partiendo de la Real orden de 7 de junio de 1859, ratificada y aclarada con Real decreto de 31 de mayo de 1860 por la que se aprobó el proyecto de*

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<sup>71</sup> It wasn't until 1897 that Sants, Sant Martí de Provençals, Sant Andreu, Gràcia, Les Corts and Sant Gervasi were aggregated except for Horta in 1904, Sarrià in 1921, Zona Franca in 1920, the right side of the Besòs River in 1929, the Northeastern area of Hospitalet del Llobregat in 1933, and finally the area of 'casas baratas' in Santa Coloma de Gramenet in 1943.

*reforma y ensanche de Barcelona del señor Cerdà, la cuestión se presenta clara, clarísima sin dar lugar á la menor duda, aparte de que el precitado proyecto pasó á informe de la Junta consultiva de caminos, canales y puertos que lo emitió favorablemente. Todos estos antecedentes han sido encontrados en el archivo del ministerio de Fomento, por los señores Capdevila y Colomer, secretario de esa Alcaldía y oficial primero de ese Ayuntamiento respectivamente, habiéndoles allanado el camino los señores Paz y Plá y Martí, comisionados por los propietarios de esa ciudad que, al igual que los señores Rius y Taulet y Travila, vinieron aquí para combatir el plano Baxeras y prohiar el del señor Cerdà que en el mero hecho de abrazar la reforma interior de Barcelona y su ensanche y de haber merecido su aprobación por el Gobierno, guardan los señores Rius y Taulet y Travila la plena seguridad que el señor ministro de la Gobernación desestimaré el proyecto Baxeras y acordará la reforma conforme á lo prevenido en la Real orden de 7 de junio de 1859 aclarada con Real decreto de 31 de mayo de 1860 que por quedar consentida no cabe sobre ella reclamación alguna.*

*Buen petardo se van á llevar los señores Fontrodona y Tort y Martorell que ayer llegaron aquí para apadrinar el proyecto del señor Baxeras.que por lo visto harían causa común con este señor, cuando su aprobación por el Ayuntamiento, del cual formaba parte el indicado señor Fontrodona” (LVG, 1883-07-20: 4754).*

For this reason, a Real Decreto was issued as follows:

*“Art 1.º Con arreglo al art. 83 del reglamento para la aplicación de la vigente ley de Expropiación forzosa de 10 de Enero de 1879, se declara de utilidad pública la obra á que se refiere el proyecto de reforma interior de la ciudad de Barcelona, estudiado por D. Angel Josadrinar el proyecto del señor Baxeras.que por lo vistérminos propuestos por el voto particular de la Real Academia de Bellas Artes de San Fernando, describes y detalladas minuciosamente en el informe del expresado voto particular.*

*2.º A tenor de lo dispuesto en el art. 84 del propio reglamento, se aprueba desde luego todo el referido proyecto con las siete modificaciones indicades, rigiendo con respecto a las grandes vías A,C y B, lo dispuesto en el artículo siguiente, y entendiéndose aprobada definitivamente toda la parte del proyecto que no sufre modificación alguna; y en cuanto á los puntos ó partes que hayan de sufrir modificación, se otorgará la aprobación definitivamente después de comprobarse que en el plano general, en los de detalle, y en los documentos que integran ó constituyen el proyecte de reforma, se han introducido las modificaciones de que antes se ha hecho mérito, para quedar de esta suerte aprobada definitivamente la totalidad del proyecto.*

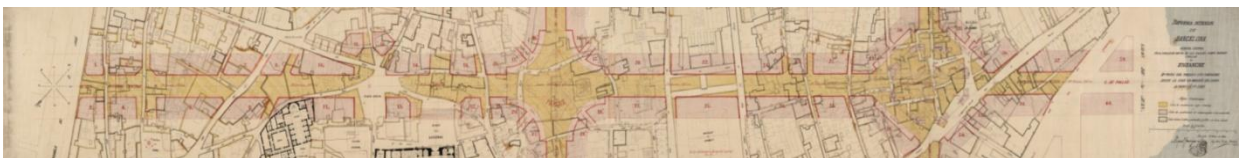
*3.º Las grandes vías segrandes vdar de estos con las letras A . C. y B., que constituyen la base del proyecto, se entienden aprobadas de 30 metros de latitud las dos primeras, de cuya latitud formarán parte los pórticos de cinco metros de anchura que se establecen á cada lado de dichas vías, midiendo 20 metros de ancho el centro de las mismas desde fachada á fachada; y con respecto á la vía B., con la latitud de 20 metros sin pórticos, tal como representan dichas tres grandes vías en los planos del proyecto” (Gaceta de Madrid, 1887-04-16: 130).*



In the face of such decree, the heirs of Ildefons Cerdà lodged an appeal demanding its suspension and the application of the provisions from July 7th 1859 R.O to the Proyecto de Reforma. This appeal was not accepted and finally the Baixeras project was approved by Real Decreto after the revisions presented by the Academia de San Fernando: "*Artículo 1.º Se aprueba definitivamente la totalidad del proyecto de reforma interior de la ciudad de Barcelona, presentado por D. Angel José Baixeras, tal y como resulta después de las modificaciones introducidas con arreglo á lo que dispone el Real decreto de 12 de Abril de 1887*".



**Fig. 78** Partial plan from Carrer de Consell de Cent to the Pla de Palau and from Passeig de Sant Joan to Paral·lel. At the bottom right shows indicated signs of existing buildings under construction or to be demolished; public buildings, markets, monuments, municipal buildings, gardens; alignments. New facilities are projected like "Palacio de Bellas Artes" between carrer de Jaume I and plaça del Rei; "Salones Públicos" on Santa Caterina market; "Palacio de Justicia" above Plaça de Catalunya, and several markets one of them replacing Hospital de la Santa Creu, accompanied by a theater and a Correus building (Cabañes, Abril, 1880. AHCB)



**Fig. 79** Interior Reform of Barcelona. The Gran Via Central straight prolongation of Campo Sagrado and Pallás del Ensanche streets. 2<sup>nd</sup> piece of the layout corresponds from Granvia Marqués del Duero to Paseo de Sant Juan (Buigas Monravà, Garriga i Roca, 1880. AHCB)

Angel J. Baixeras presented his Plan of Interior Reform and its fundamental idea was that of the three arteries linking the medieval city to the Eixample, following the layout of Cerdà's project with slight modifications and naming them A, B and C. Vía A corresponded to today's Vía Laietana and Vía C was the transversal one and had the same prolongation as Cerdà's, but Via B instead of being projected from Carrer Muntaner it started in Plaça Universitat and linked it in a straight line until the end of Avinguda Paral·lel forming a big square aligned with Barcelona dock's.

*"Al estudiar el ingeniero Cerdà su proyecto de ensanche, incluyo también un inicio de reforma interior, que se limitó a tres calles; dos en dirección montana-mar y una tercera transversal. Estas tres vías han sido la base de todos los sucesivos planes; pero les son, en general, superiores, por su mayor anchura (en general 30m o mas) y las variaciones que privan de monotonía a su trazado"* (Martorell, Florensa, Martorell, 1970: 79).

On one hand, the purpose of these arteries was to open up the old town and improve its connectivity and circulation but on the other hand many important monuments were to be destroyed such as the Hospital de la Santa Creu, Casa de la Caritat, Drassanes shipyard, Cases dels Canonges, Saló del Tinell among others. The areas most affected were the medieval neighborhoods of Pi, Santa Maria del Mar, Santa Caterina, Sant Agustí Vell and Sant Pere in which the old fabric was to be destroyed and replaced by a chamfered orthogonal grid following Cerdà's Eixample connecting by Carrer Bruc to Pla del Palau and Carrer de Girona to the Born Market. In total, the plan affected 3,671 estates with total demolition of 1,683 buildings and partial demolition of 720; 339 blocks of the leaving only 233; and created 186,399 m<sup>2</sup> of new public spaces (Peiró, 2001).

However, the Cathedral was important for Baixeras so he added four streets that offered perspectives of its four sides and he proposed a large square in front of the Cathedral's main façade and a large garden in the rear part of the temple extended to Carrer Jaume I giving visibility to the apse. Baixeras's Plan anticipated the construction of marketplaces and squares, placing them near these major arteries generating by that economical value and quality to the surrounding area. His main interest was reassessment of the real-estate value of strategically positioned areas within the urban fabric which meant taking back control of a city that had hitherto been frequently occupied by the popular sectors, and reevaluate public spaces providing them with services, sanitation, hygiene, and new modern monumental image (Molet i Petit, 2003; Busquets, 2003).





**Fig. 80** Baixera's Plan with the Vias A, B, and C based on Cerdà's three arteries with slight modifications to Via B (Baixeras, 1888. AHCB)

The plan was received with mixed feelings; it was accepted by the City Council but strongly rejected and defied by the landowners and associations<sup>72</sup> who were afraid of losing their properties and demanded compensations.

It had many deficiencies (Vega i March, 1897) and it was referred to as a rapid and improvised project and criticized for its rectilinear form and the amount of monumental, historical and artistic buildings it destroyed.

*"[El proyecto Baixeras] se estudio rápidamente y afecta a una tercera parte de la antigua Barcelona. No es posible ejecutar la reforma de barrios existentes con proyectos de tal magnitud improvisados [...] en el plan Baixeras no es tomada en cuenta la existencia de notables construcciones de interés histórico y monumental; las hay amenazadas por la piqueta y la palanca destructoras; otras corren peligro de ser escondidas tras*

<sup>72</sup> There were further complaints from the 'Asociación de Arquitectos de Cataluña' (AAC) (Association of Catalan Architects) and the 'Asociación de Propietarios de Fincas Urbanas de Barcelona y su Zona de Ensanche' (APFU) (Association of Urban Estates of Barcelona and Ensanche Area), that aimed at the defense of property rights (Cócola, 2010).

*construcciones modernas. Si las situásemos en valor, servirían de atractivo a las nuevas vías” (La Catalunya, 20-05-1911: 306, 307).*

Adolf Florensa<sup>73</sup> stated that in Baixeras’s opinion monuments were a few, and to give importance and value to them and Barcelona’s public buildings, he isolated them from the traditional fabric and surrounded them with vast public spaces and avenues. Baixeras was following a similar method inspired with the European urbanism and examples of his time because this meant destroying a vast number of neighborhoods. Florensa added that it was a ‘monstrous’ act to demolish many urban spaces, and old monuments in order to save buildings of private property.

*“Para Baixeras los monumentos arquitectónicos de Barcelona eran la Catedral, el Pino, Santa María del Mar, Santa Águeda, el Ayuntamiento y la Diputación y pocos más. [...] lo demás, el ambiente, el carácter de los barrios antiguos, no era para Baixeras mas que rincones sucios y malolientes y procuraba ‘mejorarlos’ [...] Pero esto no nos puede extrañar, porque Baixeras redactaba su proyecto entre 1870 y 1880, y entonces los grandes modelos del urbanismo europeos, Paris, Viena, habían empleado estos métodos mucho más en grande” (Martorell, Florensa, Martorell, 1970: 82).*

Apart from the evisceration that they caused what affected these kinds of reform plans was the issue of eminent domain. Until then, there was neither the procedure nor the means of expropriation to carry out such interior reformations. Besides, the ‘Ley de Expropiación Forzosa’ of 1836 obliged to compensate those who assigned or ceded their lands and properties to the City Councils.

Aware of this issue, and before making his project public in 1878, Baixeras promoted to change or expand the Law. He submitted to the Senate a report entitled ‘Ley de reforma interior de grandes ciudades’ (Baixeras, 1880) (Law of interior reform of big cities) which was eventually approved and included in section 5 of the new expropriation law approved on the 10th of January 1879 precisely ten days before he presented to the City Council his Plan of Interior Reform<sup>74</sup>.

The law facilitated expropriation and financial problems by authorizing the acquisition of property needed for public utility and by allowing the expropriation of not more than 20 meters wide from the affected properties on both lateral sides of the new roads. This resulted in alienating the affected properties which allowed land speculation and increase in property value sufficient enough to cover the costs of expropriation and rebuilding (Peiró, 2001; Molet i Petit, 2003). The later ‘Ley de Saneamiento y Reforma Interior de las Grandes Poblaciones’ sanctioned on 18<sup>th</sup> of March 1895 was an even more improved

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<sup>73</sup> Adolf Florensa i Ferrer, architect and professor in Escola d’Arquitectura de Barcelona, director of the ‘Servicio de Edificios Artísticos y Arqueológicos’ and the ‘Servicio para la Conservación y Restauración de Monumentos’, and responsible for many projects in Ciutat Vella such as Casal del Metge, Casa Cambó, Avinguda de la Catedral, Plaça Sant Felip Neri, among others.

<sup>74</sup> For more information Baixeras’s Interior Reform, the ‘Ley de expropiación forzosa’ and the Banco Hispano Colonial’s financing and budget check *Anuario Estadístico de la Ciudad de Barcelona* (1907) found in ARCA.

version of the 1879 law where it gave rights to both expropriators and owners. It expanded the lateral expropriations to 50 meters wide; regulated auctions; specified perquisites for the execution of the new plans and projects; facilitated taxation; and it not only reestablished compensations and gave rights and to owners to intervene in the expropriation procedures but also to tenants, traders and industrialists who have been exercising their industry in the same premises for ten consecutive years.<sup>75</sup>

*“A la Barcelona del moment es vivia, urbanísticament parlant, un fenomen molt remarcable: tots els esforços es polaritzaven cap a l’ Eixample (...) una marcada dicotomia: d’una banda la vitalitat de l’Eixample creixent, ide l’altra l’abandó de la ciutat vella. Aquesta situació, denunciada per exemple per Bonaventura Basscgoda, posavaen un primer pla la urgència d’abordar d’una vegada el problema de la reforma interior de la ciutat” (Fontbona, 1985: 146).*



**Fig. 81** Plan of Interior Reform approved by Reales Decretos of 12 April 1887 and 14 July 1889 (Serra, 1891, Lit. Thomas. ICGC)

Moreover, the plan lacked a technical feasibility, sewage and alignment studies and it faced financial problems especially that the administration of that time was indebted after

<sup>75</sup> There are several issues dedicated to this law in for example: *Revista de la Asociación de Arquitectos de Cataluña* 1897 no. 56 and no. 60; *Arquitectura y Construcción* 23 March 1897 no. 2, 23 April 1897 no.4, and 23 May 1897 no.6 found in BNE; *La Gaceta de Obras Públicas* 20 January 1897 no. 8.

the 1888 Exposition. This led to many modifications and delays of the plan until it was finally approved in 1889. It is important to mention that during this time Garcia Fària sewage plan included the old town and followed the same axis layouts proposed by Baixeras (Gómez Ordóñez, 1992).

In spite of Baixeras efforts and careful work on the legal and financial issues especially with the Universal Bank, the plan continued to face problems and rejections until his death in 1892 and it wasn't until 16 years later that only one part of it was carried out, and that was artery A known as Via Laietana also proposed by Cerdà.

*“Las dificultades de financiación y gestión con que tropezó el proyecto -incluso a pesar de haber desarrollado en paralelo la primera ley de expropiación forzosa- limitaron su aplicación a la apertura de una sola de las grandes vías -la actual Via Laietana- coincidente con una de las propuestas de Cerdà” (Tatjer, 1998: 17).*

What pushed the execution of Baixeras's Plan were the elections that took place in November 1901. Barcelona's bourgeoisie and their representatives the Lliga Regionalista gained the elections and made it to the City Council. They assigned as councilor Josep Puig i Cadafalch and their program was to convert Barcelona into a modern Mediterranean capital, promote tourism, improve industrial development, and provide social stability and progress. At the same time they aspired to create an urban plan of aligning and sanitizing the old town and regulate the urban growth of the surrounding municipalities recently aggregated to the city (1897) (Puig i Cadafalch, Barral, 2003; Torres, Llobet, Puig, 1985; Peiró, 2001; Busquets, 2003).

During that time, the City Council convened a contest in 1903 to resolve the problem of linking the city and its ensanche (Cerdà Plan) to these new aggregated municipalities. Winning the contest was the French architect and urban planner Léon Jaussely whose plan was accepted on the 12 December 1907. Despite its title, 'Plan de Enlace' (Interconnection Plan) (also known as Romulus), Jaussely's plan also covered the whole city planning and, therefore, included proposals for the interior reform of the old town. From Cerdà's and Baixeras's plans, he retained Via A or Laietana whose execution was about to begin, but in the rest of the town he completely left out Via B, and kept the C making it the backbone of the city's interior reform. He substituted Via B with a diagonal axis that connected Plaça Goya with França Station and created several monumental squares in the crossroads of these vías all reflecting the typical characteristics of architects emerging from the 'Ecole de Beaux Arts' in Paris (Martorell, Florensa, Martorell, 1970; Torres, Llobet, Puig, 1985).

However, Jaussely's plan, even with its final approved and reduced version in 1917<sup>76</sup>, caused turmoil and was not executed. It had no impact or effect on the interior reform and was reduced to a plan of a few major roads and several open spaces (Martorell, Florensa, Martorell, 1970) outside Ciutat Vella. They were based on his model and projected for the

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<sup>76</sup> In 1917 an alternative based on Jaussely's Plan was drawn up by Romeu, Porcel and Flaqués under the title 'Plan General de urbanización de Barcelona'.



1929 Universal Exposition such as Avinguda Gaudi, the Jardinetes de Gràcia, the gardens of Passeig Sant Joan, Avinguda Mistral and Marqués de l'Argentera, and Avinguda Diagonal between Pedralbes Park and Plaça Francesc Macià, among others.

However, they are still predominated by the 'percement' characteristics as Torres, Llobet and Puig pointed out: *"Malgrat tot, el caracter estructural del pla es reflecteix també en la definició de les direccions del «percements» o avingudes de reforma, d'interès sanitari, però, sobretot, coherents en relació a la nova estructura de la ciutat"* (Torres, Llobet and Puig, 1985: 94).



**Fig. 82** Jaussely's preliminary project 'Enllaços de la Ciutat de Barcelona' showing the green spaces. No.11 on left and no.2 on right from the 29 plans presented under the title "Romulus" (Jaussely, 1904. AHCB)

*"Para corresponder a grandes agrupaciones de población es preciso comunicaciones rápidas, anchas vías para los numerosos medios de transporte y casas altas, grandes calles y plazas, grandes espacios libres para su higiene y abundancia de servicios públicos etc., y todo ello realizado amplia y grandiosamente. Precisamente es la amplitud necesaria es la que da a las grandes capitales ese aspecto monumental que es uno de los mayores atractivos de su belleza. [...] Para no citar más que un ejemplo típico, obsérvese que la característica de la mayor parte de las plazas que se hacían antiguamente, era la de ser cerradas o parecerlo a causa de la estrechez de las calles; hoy el ancho de las que concurren a las plazas es tal que no es posible obtener la impresión cerrada. De la misma manera es preciso renunciar a otras muchas cosas y buscar la armonía de impresiones nuevas. [...] La nomenclatura que puede hacerse de las plazas es la siguiente: **Plazas de tránsito**, que corresponden a una necesidad de aumento de circulación, recibiendo y canalizando la afluencia de varias vías; en esta categoría entran los ronds-points y las grandes plazas en estrella. Estas, generalmente neutras, pueden estar dotadas algunas veces de edificios públicos, y cuando son importantes, tiene cierto carácter monumental. **Plazas arquitectónicas** de servicios públicos o monumentales. **Plazas de ornamentación**. **Plazas con jardines** como los squares"* (Jaussely, 1907)



## Opening the Via Laietana

In 1908, for financial help, the City Council collaborated and signed a contract with the Banco Hispano Colonial. As a result, on the 10<sup>th</sup> of March 1908 the first demolitions to make way for the Gran Vía A<sup>77</sup> (Via Laietana) started and it was a complex operation that took place between 1908 and 1958 as part of Barcelona's interior reform and one of its main urban policies.

It underwent profound changes reflecting the political, social and urban transformation of the city during the first half of the 20th century.

*“Les enormes dificultats financeres del municipi, que arrossegava encara el deute del 1888, i la freqüent discordança amb l'alcalde nomenat per Madrid, obligaren els partits republicà i regionalista a l'entesa. Aquesta col·laboració es va concretar en el programa 'Higiene i Cultura', que tenia en l'execució de la reforma de la ciutat vella i en el pressupost extraordinari de cultura per a la construcció d'equipaments escolars les seves dues principals fites. Una i altra van tenir sort ben diversa. Mentre la reforma i el projecte d'obertura de la Via A eren possibles gràcies al conveni amb el Banc Hispano Colonial, i els treballs d'enderroc s'iniciaven el 1908, aquell mateix any el pressupost extraordinari de cultura havia de ser suspès per l'autoritat governativa, i les seves realitzacions van posposar-se més d'una dècada” (Nicolau, Fuster, Venteo, 2001: 20).*

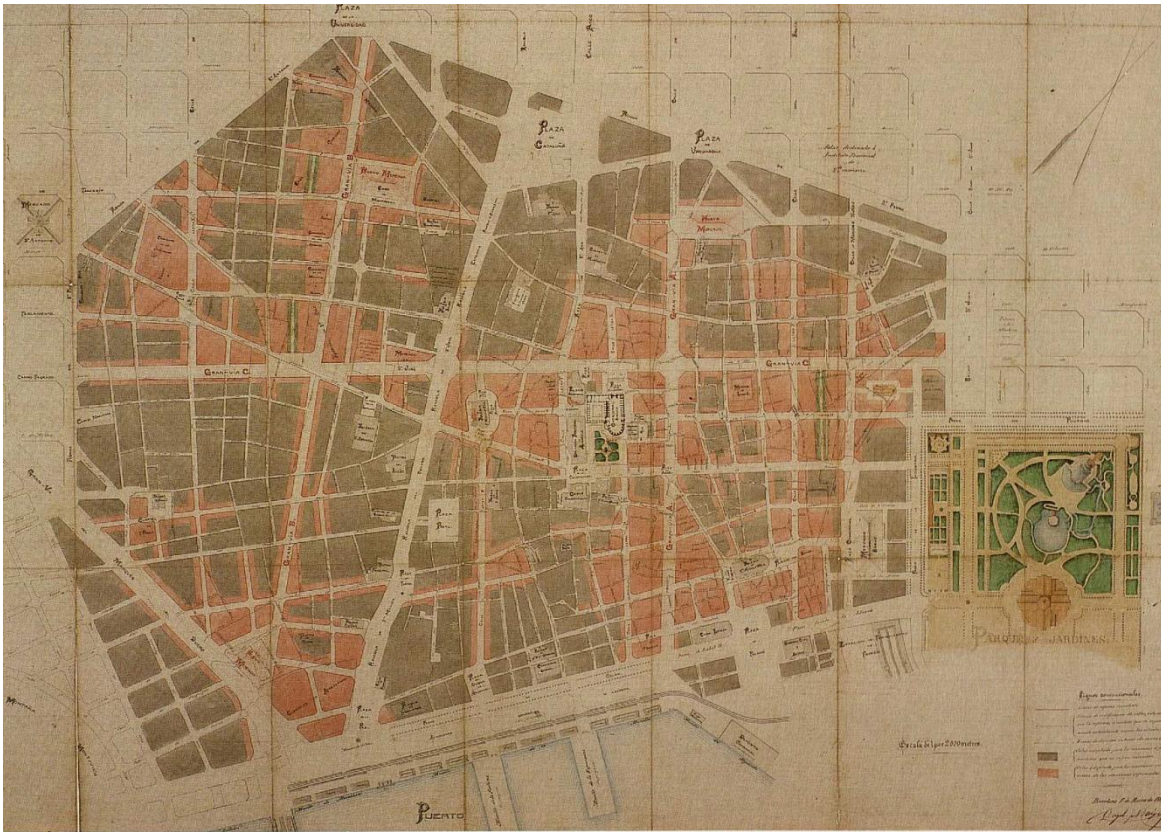
During those years a nationalistic Renaissance wave, 'Catalanist movement', started to surge with the ideas of embellishing the old town and this went hand in hand with the construction of Via Laietana, hence, in the same year, in 1908, the 'Sociedad de Atracción de Forasteros (SAF) (Tourist Attraction Society) was founded. Its main goal was to revalue the existing heritage, restore the historic buildings around the Cathedral, and promote tourism by recreating the old town into a 'Gothic Quarter', an expression used in 1911 by the politician Ramón Rucabado in his article in La Cataluña weekly magazine. This showed that there was a 'conscious of loss' concerning the Via Laietana's opening and the art competition<sup>78</sup> in 1908 that aimed to collect and document a graphic memory of the places that will cease to exist was further proof (Nicolau, Venteo, 2001).

The urban regeneration policy back then was under the name of hygiene and sanitation, but in fact, it was also a process of modernization, restoration of historic and artistic heritage, urban and economic flow growth, and precisely, to place the city in the international urban market and position it in the category of leading cities.

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<sup>77</sup> For more information the Banco Hispano Colonial's financing and budget and the all the buildings affected by the Via Laietana's demolitions check *Anuario Estadístico de la Ciudad de Barcelona* (1907) in ARCA.

<sup>78</sup> A chapter dedicated to this 'Concurs Artístic de la Vella Barcelona' is found in (Fuster, Nicolau, Venteo, 2001) *La construcció de la gran Barcelona: L'Obertura de la Via Laietana, 1908-1958* and more photos and drawings can be found in the Museu d'Història de la Ciutat, l'Arxiu Històric de la Ciutat and l'Arxiu Fotogràfic de l'AHCB. See also (Còcola, 2010)



**Fig. 83** Pere Falqués's adaptation plan of the Vias A, B, and C. It is traced above Baixeras's Plan delimiting the spaces that will be affected by the opening of the Vias (Falqués, 1907. In Torres, Llobet, Puig, 1985)

"Ja no es tracta de fer una Reforma General, comes preconitzava en el projecte de 1888, sinó l'obertura de les tres vies que havia definit Cerdà, seguint el traçat que, posteriorment, va assenyalar Baixeras. Des d'aquest moment, i durant molts anys, la Reforma sera entensa només com aquesta obertura de vies. La realització definitiva de la Via Laietana, malgrat que no va seguir aquest projecte, encara va reformar més la idea"

The procedure of eminent domain and demolitions of buildings went fast. The Via had to destroy anything that stood in its way and it started by demolishing the houses in front of Antonio López square. In Baixeras's original Plan, the Via was increased to 30m with 5m porches widening by that the roadway and enabling a better transit for carriages. But the City Council with the municipal architect Pere Falqués, updated and modified the plan to two side-strips of minimum 20m each and left the junctions according to the original plan (Martorell, Florensa, Martorell, 1970).

On one hand, the Via Laietana increased accessibility and connection – especially between the Eixample and the port–; created new buildings and a modern business center; and helped in the construction of modern tunnels and sewers<sup>79</sup>.

<sup>79</sup> The Via Laietana also helped in the construction of modern tunnels and sewers that years later were used for the installation of the underground railway and metro, a public transportation project of paramount importance in shaping the metropolitan Barcelona (Fuster, Nicolau, Venteo, 2001).

On the other hand, it involved considerable deficits and errors:

First, it evoked major management and financial problems and as Puig i Cadafalch wrote in *La Veu de Catalunya* that *“peró tot aixó no es possible tingui efectivitat sense diners, y els diners els ciutadans no volen pagarlos. Ahir s’hi resistí la classe mitja, avuy s’hi resisteixen els pobres, y uns y altres condemnan al Municipi de Barcelona un déficit de millions, impossible d’aixugar, sino’s vol convertir la ciutat en un Poblete amb menos policia de la que tenim, amb menos netedat, amb mes fanch y sense llums”* (1903-05-12: 1).

Second, it caused devastating amounts of demolitions of valuable architectural and historic monuments. Many of them appeared between scaffoldings and ruins soon to be swept away by the maelstrom of destruction.

Many realized the amount and weight of damage this plan caused and in Florensa’s opinion it was a ‘barbaric’ act that should not be repeated.

*“En aquellos años se fue elaborando, lentamente pero de manera sólida, la convicción de que era una barbaridad cortar en línea recta una gran avenida a través del cuerpo viejo de una ciudad. Cuando se estaban terminando los derribos, ya todo el mundo estaba convencido de que la operación, llevada en aquella forma, no debía repetirse más; desgraciadamente la Vía Layetana habían interesado las zonas más densas y delicadas”* (Martorell, Florensa, Martorell, 1970: 86).

Busquets added to that:

*“The demolition of highly regarded constructions to make way for the Via Laietana mobilized public opinion as regards the conservation of the atmosphere and values of the medieval city: it needed more salubrious conditions but without overriding it’s cultural attractions, which required revision”* (Busquets, 2003: 122).

Both Jeroni Martorell<sup>80</sup> and Ramón Rucabado had their thoughts on the Plan written in their articles in *La Catalunya*, both stressing on the need of an interior reform but not through rigid blind destructions. After the works started on the first section of the Via, Martorell commented on the lack of connection and relation with its surroundings. Streets and squares were arbitrarily interrupted, buildings were put down without considering their artistic, monumental or heritage worth. To him cities are considered as live organisms with their own character and physiognomy and their natural flow of circulation and traffic should be respected.

*“Veréis que entre lo nuevo y lo viejo no existe relación alguna. Como si la vía se abriese en medio del campo, sus alineaciones nada tienen que ver con las calles vecinas; en lugar de enlazar francamente la una con las otras, se obstruye su comunicación violentamente [...] Artísticas construcciones, antiguos monumentos, venerables testimonios del pasado, inmediatos, próximos á la nueva calle que debieran animarla y embellecerla, son*

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<sup>80</sup> Jeroni Martorell i Terrats, architect and director of the ‘Servicio de Catalogación i Conservación de Monumentos de Catalunya’(SCCM). From his conservation works; Casa dels Canonges and Casa dels Velers, among others.



despreciados en absoluto: los unos permanecen sin alterar su actual defectuoso emplazamiento; otros quedarán ocultos tras nuevas construcciones; los hay que van á ser bárbaramente derribados" (Martorell, 1911-05-20: 305, 306).

As for Rucabado he lamented that the plan had started in the old town and that the destruction was strictly rectilinear and blindly destroyed the old neighborhoods' structure without providing a new and better alternative.

*"¿Qué tiene, pues, de extraño, que en la Reforma, en el trazado de las vías mayores, se haya destrozado ciegamente, con la ceguera, la rigidez y la implacabilidad necesaria á todo espíritu democrático, la estructura de los barrios viejos sin sustituirla, al menos, por otra estructura más perfecta y adecuada á las necesidades modernas? [...] El espíritu democrático, antítesis y negación del espíritu civil, no reconoce, no presta acatamiento al alma de las ciudades y por esto las intervenciones que se le conceden tienen algo de la fuerza irresistible y destructora, pero rectilínea !eso sí! de una bala de cañón. La reforma de Barcelona es una verdadera demolición á cañonazos. Desgraciadamente se ha comenzado por la parte antigua de la ciudad y muchos de los desaciertos son irreparables, y los que están por hacer, pero que amenazan, serán funestísimos si no se levantan los barceloneses á impedirlo"* (Rucabado, 1911-05-20: 309).

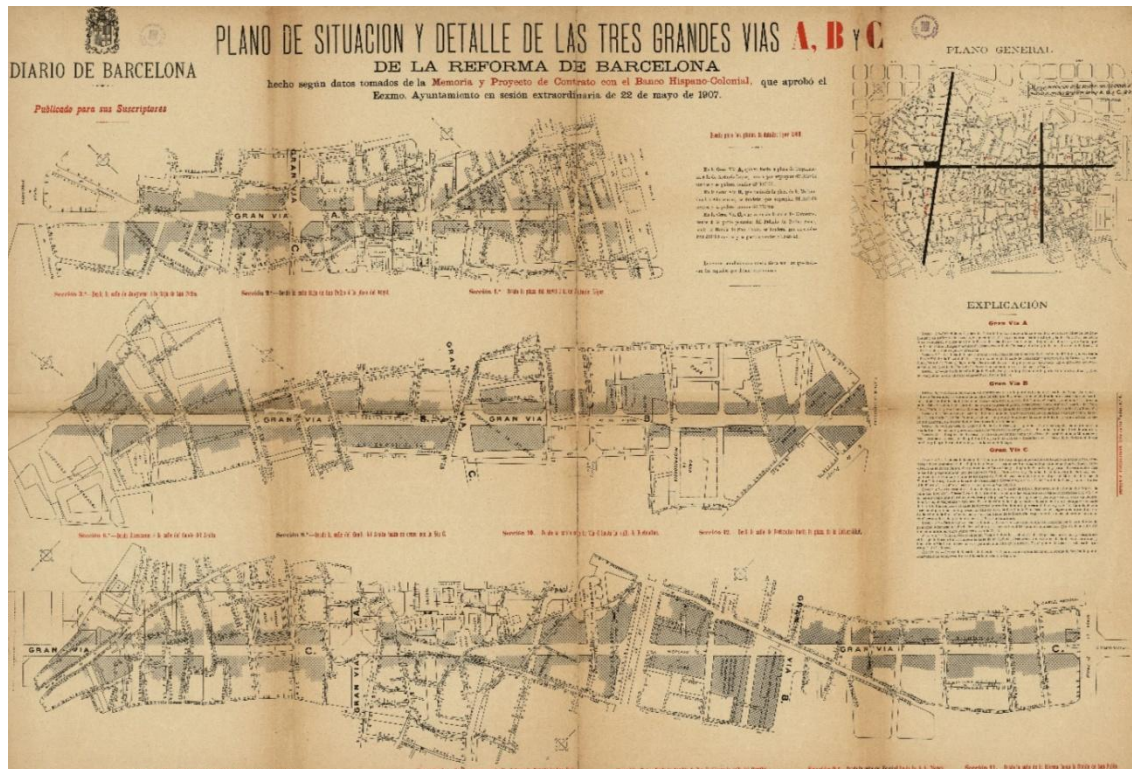


Fig. 84 Detail and situation plan of the three Vias A, B, and C based on information from the Memoria and project in the contract with the Banco Hispano-Colonial. Approved by the City Council in 22 May 1907. (Baixeras, ICGC).



**Fig. 85** Destruction of the upper part of what was Carrer Reformes a la Arcs de Jonqueres, at the limit of Carrer de Bilbao making way for the Via Laietana (Ballel Maymí, 1913. AFB)

**Fig. 86** First plan showing the Riera de Sant Joan, and at the back the Catedral of Barcelona (Vidal Ventosa, 1908-1911. AFB)



During the mid 19<sup>th</sup> and early 20<sup>th</sup> century, cities had become adjusted to industrialization conditions and interior reform was viewed differently; the old should make way for the new. For the sake of progress, circulation and hygiene, interior reform plans were achieved through longitudinal rectilinear streets and infrastructures without taking into



consideration the artistic and historic value of medieval neighborhoods, heritage, culture or financial matters. Due to their impact, nearly all cases of interior reform were criticized. Plans and operations like Cerdà's and Baixeras's interior reform, and Via Laietana were in the category of those methods (Florensa, 1957) (Martorell, Florensa, Martorell, 1970), *"es decir, en línea recta sin respetar nada y causo la perdida de inmensas cantidades de elementos de valor y de ambientes típicos de la ciudad antigua"* (Florensa, 1957: 15).

Such urban operations, as mentioned earlier, were called in French 'eventrement' and 'sventramento' in Italian which literally means 'disembowelment' or 'gutting' used in many European cities and foreknown by Haussmann's transformation of Paris.

*"Bajo la impresión de las grandes operaciones urbanas que se llevaron a cabo en Paris por el prefecto Haussmann bajo Napoleon III durante dieciocho años, de 1852 a 1870, todas las grandes ciudades europeas aspiraron a hacer algo parecido [...] la operación efectuada sobre los viejos barrios de Paris era "eventrement", es decir, destripamiento. En realidad se destruía todo lo existente, trazando en su lugar nuevas vías bordeadas de casas también nuevas. [...] Afortunadamente los recursos financieros de Barcelona a principios de este siglo distaban mucho de ser comparables a los de Paris del segundo imperio y esto nos salvo"* (Florensa, 1957: 14, 15).



Fig. 87 View of the Via Laietana from Carrer del Consulat (Ballel Maymí, 1910. AFB)



**Fig. 88** Views of destruction from Carrer de l'Avellana towards Sant Pere més Baix (Ballel Maymí, 1910. AFB)

However, one cannot deny that reform is a necessity and demolition is inevitable (Puig i Cadafalch, 2003; 1927) and in Paris the 'eventrement' contributed to the formation of the "gran metròpolis" but the city could have been also saved with small and selective adjustments as Florensa affirmed.

*"En Paris, donde el centro antiguo seguía y sigue siendo el corazón de la ciudad, estas operaciones, aunque produjeran pérdidas artísticas e históricas de mucho valor que desesperaron a arqueólogos y artistas, no hay duda de que han hecho posible el desarrollo posterior de la gran metròpoli. Pero es evidente que incluso allí hubiera podido salvarse la «Cité» con pequeños retoques, lo que habría dado a Paris un verdadero museo viviente que sería ahora uno de sus mayores atractivos"* (Florensa, 1957: 15).

In 1913 the demolitions of Via Laietana ended leaving a large avenue that divided the whole city centre. Not only was the new avenue criticized but its layout and junctions were badly linked and matched to the existing intact side streets. The immediate old streets were left enclosed by new building blocks and the new streets ended up with no outlets and enclosed by old houses. The new Via crossed the city isolated from and with no communication with its urban fabric as Martorell (1929) stated:

*"La recta indefinida de gran longitud, uniendo directamente los lugares citados, violenta muchas cosas. Calles y plazas quedan cortadas arbitrariamente; los edificios son afectados sin tener en cuenta su valor intrínseco ni histórico; los problemas de la urbanización desde los puntos de vista viario, artístico, y económico se hallan resueltos defectuosamente. [...]"*

*Las nuevas vías no llevarán la vida á los barrios que atraviesan como debieran hacerlo; existirá, al contrario, entre unas y otras, relativo aislamiento” (Martorell, 1911-05-20: 306, 307).*

Therefore, in 1914 the City Council commissioned three renowned architects to the restudy of the Via's articulation with its surroundings. The first section, starting from Plaça Antonio López to Plaça del Àngel, was assigned to Lluís Domènech i Montaner, the second, from Plaça del Àngel to Sant Pere Més Baix, was assigned to Josep Puig i Cadafalch, and the third, from the last until Plaça Urquinaona, was assigned to Ferran Romeu<sup>81</sup>. They improved the avenue's whole outline, as well as built parallel and perpendicular secondary roads for a better connectivity with its surroundings, created openings, and changed its character by widening parts of its layout<sup>82</sup>. Some of these ideas and proposals were approved and one of them gave way to Plaça Berenguer el Gran, in the second section, anticipated by Puig i Cadafalch to provide a better view of the Roman walls and Santa Àgata chapel. During that year, 1914, architect Adolf Florensa, had started working for the City Council and got involved in the reform plans and projects of the old town (Florensa, 1964; Busquets, 2003; Martorell, Florensa, Martorell, 1970; Nicolau, Fuster, Venteo, 2001; Molet i Petit, 2003).

## **Darder Plan**

The reactions to the Via Laietana led to the revision of the other avenues B and C (AA.VV, 1912).

In 1918, the City Council commissioned architect Antoni Darder to revise and modify the two avenues under the plan of 'Proyecto de modificación de las grandes vías B y C de la Reforma Interior de la ciudad y enlace de las mismas con las calles antiguas' (Modification Project of avenues B and C of the city's Interior Reform and their link to the

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<sup>81</sup> Ferran Romeu i Robot architect and professor in the Escola d'Arquitectura de Barcelona.

<sup>82</sup> The 1<sup>st</sup> section, in order to solve the problem, Domènech created a few parallel lanes to the Via which would stop all transversal streets coming from the old town as well as from the Via itself (one of the streets known nowadays as Sotstinent Navarro). He also proposed, on one side, opening a new gate in the Roman Walls to connect Plaça Sant Just to the Via which would have destroyed the Palau Moixó and Palau Requesens, and on the other side a large street and square to give more visibility to Santa Maria del Mar which meant the destruction of Caputxes Street (they were not approved). In the 2<sup>nd</sup> section, Puig proposed extending the width of the square situated in the intersection between the Via Laietana and the Via C. He designed Joaquim Pou Street offering by that an access to a series of old alleys and a view to the Cathedral. Moreover, in order to expose Santa Àgata Chapel, he anticipated the creation of Tapineria Street and Plaça de Berenguer el Gran, and to make the Roman Walls visible he proposed a staircase that would connect Plaça de Berenguer el Gran to Plaça del Rei (his proposal was never approved). In the 3<sup>rd</sup> section, Romeu moderately modified the layout of the Via to save the Casa del Gremi de Velers, and created Magdalenes Street that also gave continuity to a series of old alleys.

old streets). To show more respect for monuments and avoid further destruction Darder proposed a different plan to the rectilinear layout and split Via C into several branches.

Torres, Llobet, and Puig pointed out that:

*“La innovació mes rellevant d’aquest projecte radica en la cobertura de la via “C” i en la ruptura de la contintitat del traçat de la via “B”. [...] Els carrers corbats estaben de modes en la Urbanística de començaments de segle. En el Pla d’Enllaços, aprovat paral·lelament aquest projecte, la inflexió del traçat dels carrers es current. Però la corbatura dels carrers en el casc antic també té quelcom d’antiquat. Generalment, els carrers del projecte de Darder son simples eixamplaments dels carrers existents previament. En aquest punt les propostes s’assemblen a les del Projecte d’alineacions i reforma de Garriga i Roca”* (Torres, Llobet, Puig, 1985 : 184).

On the eastern side, Via C emerges from Plaça Nova, and near Santa Caterina market it splits into two branches; one heading towards Arc de Triomf and the other towards Ciutadella Park. Then from Plaça Nova it emerges in the opposite direction where it also splits in two; one branch following Carrer del Cardinal Casañas and continuing through Carrer de Sant Pau as far as Paral·lel, and the other passing along Carrer de la Portaferrissa and continuing through Carrer del Carme and Carrer de Sant Antoni as far as Ronda de Sant Antoni.

Its width varied but was mainly of 30m. This modification in the layout skirted the former Hospital of Santa Creu and the arcaded square of La Boquería, which would have been demolished in the plans of Cerdà and Baixeras. In order to save the Hospital of Santa Creu and the Drassanes, Darder set off Vía B from Plaça Universitat with a swerve in the direction of Plaça dels Angels down to the street of the same name till Casa de la Caritat. Darder’s project was generally well received and was approved in 1918 but again the main objection was from the commercially valuable businesses and shops that were to be expropriated, like the ones on Carrer de la Portaferrissa and Carrer del Carme. Eminent domain would have been very costly and a ruin to the evicted businesses waiting for relocation. For this reason, it was never fully executed except for the section in front of Casa de la Caritat and the nowadays so called Avinguda de la Catedral (Martorell, Florensa, Martorell, 1970; Molet i Petit, 2003).







## The Invention of the Gothic Quarter

As mentioned before, almost all cases of interior reform were criticized for their disregard for the remains of the past and until then the city was not really considered as a heritage. It was these processes of destruction that caused the urge to preserve and restore it. As Florensa described “[...] *al quedar abierta la Vía Layetana, se había creado como una conciencia general de culpabilidad por la destrucción implacable que se había llevado a cabo*” (Florensa, 1964: 12), and with that came the question of deciding what to restore in the old town and how. Since the 19<sup>th</sup> century, Barcelona has been involved with big and important events for the sake of capital flow and urban growth. Between the 1900s and 1920s, ideas of new projects and talks of a new exposition –similar to the city’s former 1888 Universal Exposition– were rising all for the purpose of introducing Catalonia and Barcelona to the market of the world as Puig i Cadafalch (1905) indicated. In his article in *La Veu de Catalunya* he was encouraging the citizens to vote for: the Universal Exposition –that took place years later in 1929–; and for new councilors and City Council that “*tindrà més aviat glori en executar que feina en projectar*” that will convert Barcelona into a big, rich, cultured, modern city, a “*gran Barcelona, la París del Mitgdia*” (Puig i Cadafalch, 1905-11-11: 3).

On one hand, the presence of the Lliga Regionalista and its political will to improve and create a modern, progressive city with social stability, strong economy and tourism, and on the other hand, the demolitions to pave way for the Via Laietana, were all key elements in the birth of Barcelona’s ‘Gothic Quarter’, in other words, it is indirectly indebted to the opening of the Via.

*“A partir del impacto social, urbanístico y patrimonial que representó la ejecución de esta vía de trazado rectilíneo a través de una de las áreas de mayor densidad de población y de un tejido urbano que contenía notables testimonios de la ciudad medieval, no es extraño que se sucedieran algunos proyectos que trataron de reconvertir las agresivas propuestas de Baixeras en trazados más respetuosos con algunos monumentos históricos, a la vez que se recomponían algunas áreas afectadas por el propio trazado de la Vía Laietana, recreando y reinventando espacios medievales como el denominado actualmente barrio Gótico”* (Tatjer, 1998: 17, 18).

A nationalistic Renaissance wave started to surge and sought the ‘medievalization’ and embellishment of the old town. This resulted in the formation of the ‘Sociedad de Atracción de Forasteros (SAF) (Tourist Attraction Society) in 1908. It became aware that Barcelona’s monuments needed to be exhibited in a specific attractive style and atmosphere knowing that tourists mainly sought historical experiences regardless of their authenticity or originality. Therefore, the SAF and its magazine ‘Barcelona Atracción’, created in 1910, encouraged the creation of a Gothic Quarter. In the same year of 1908, the ‘Associación de Artistas de Barcelona’ (Artists Association of Barcelona) and the ‘Associación de Arquitectas de Catalunya’ (Architect’s Association of Catalonia) presented two documents in which they proposed their own views of the basic characteristics of the Gothic Quarter (Ganau, 2003).

And later in 1911, La Catalunya, the weekly magazine, dedicated a special issue, no. 189, to Barcelona's interior reform and two articles of architect Jeroni Martorell and politician Ramón Rucabado came out exhibiting thoroughly where and how the Gothic Quarter should be built in Barcelona. And in fact it was the first time the words 'gothic quarter' appeared (Ganau, 2003).

Rucabado argued that the project should be in the most emblematic area in Barcelona which is around the Cathedral whose façade had remained incomplete since the 15<sup>th</sup> century and was finally completed in 1912 in the gothic style. He pointed out that the most important historic buildings and monuments were in the Cathedral quarter, but they were degraded and surrounded by many ordinary residential houses. And to make a true gothic quarter the style in the whole area should be unified.

*“¿Por qué no podría adoptarse la unificación de estilo en este recinto, formando entre las construcciones venerables, gloriosa herencia y legítimo orgullo de la ciudad de Barcelona y las construcciones modernas rigurosamente sometidas al estilo y carácter de aquellas, un verdadero barrio gótico?*

*Un barrio gótico tal como lo hemos ideado, sería como un estuche precioso que custodia las joyas riquísimas de Barcelona, la Catedral y el Palacio de los Reyes: todas las calles incluidas en el perímetro deberían ser devueltas, no al primitivo estado de la época histórica, en que se terminó la edificación de aquellas, sino al estilo gótico catalán, intervenido por la mano experta y sabia de los mejores arquitectos modernos de Cataluña”* (Rucabado, 1911-05-20: 310).

Between 1908 and 1913, the City Council selected from the demolitions historic building materials and placed them in storages and warehouses. Martorell (1908) proposed that they could be relocated and reconstructed around the Cathedral, thus, further emphasizing on the fact that the Gothic Quarter should be built in the Cathedral neighborhood. As a matter of fact, in 1920, Martorell began the reconstruction of Casa dels Canonges next to the Cathedral that replaced several less valuable buildings. He returned the house to its primitive form restoring it with some of the stored materials imitating medieval designs. He reinvented by that an ideal reproduction of the 'Catalan House' a Catalan medieval model that would later be used in the Gothic Quarter.

As for Rucabado, he suggested that the area could be defined and delimited by constructing suspended gothic bridges all around and eliminating traffic:

*“Los alrededores de la Catedral, las calles y callejuelas incluidas en el futuro barrio, se caracterizan por el ambiente tranquilo y pacífico, por el recogimiento con que calles y casas, templos y edificios aparecen envueltos. Encerrando todo ello y acentuando el sello imponiendo, por decirlo así, respeto á lo venerable, todavía aquel carácter recogido se aumentaría más. En las calles del recinto pudiera llegarse hasta prohibir ordinariamente el tránsito rodado, suprimiendo las aceras y substituyendo los adoquines por anchas losas y los vulgares faroles del alumbrado público, por farolas artísticas del más puro estilo”* (Rucabado, 1911-05-20: 310).

## Florensa and the Gothic Quarter

The term gothic quarter was a modern and appealing name and it became even more popular between 1925 and 1927 (Florensa, 1958). The government of Primo de Rivera, the Diputació de Barcelona headed by banker Josep Mila i Camps, and especially the preparations for the 1929 Universal Exposition, accelerated and pushed this policy into reality.

Therefore, in 1927, the transformation of the Cathedral quarter into a gothic one began –a long process that lasted until the 1970s– with a main objective of creating a spectacular neighborhood attractive to tourists; and a secondary objective of removing the homeless and replacing the poor dwellings with neo-medieval buildings and open spaces that would be used for cultural, political, and leisure purposes.

The City Council of Barcelona created the ‘Servicio para la Conservación y Restauración de Monumentos’ (Service for the Conservation and Restoration of Monuments) to be in charge of and supervise the projects. It was headed by architect Antoni de Falguera who collaborated from the first day with Adolf Florensa and Josep Vilaseca<sup>83</sup> who afterward directed the ‘Servicio’. Later, in 1939, this same office became known as ‘Servicio de Edificios Artísticos y Arqueológicos’ (Service of Artistic and Archeological Buildings) directed by Florensa (as a successor to Vilaseca) and succeeded in the 1960s by the city architect Joaquim de Ros i de Ramis.

*“Al rerefons de tot aquest interès cal buscar-hi la proximitat de l’Exposició Internacional de Barcelona del 1929, que el govern dictatorial havia convertit en un objectiu essencial de la seva política urbana. Entre els preparatius d’aquest esdeveniment internacional es va dur a terme una intensa campanya de restauració d’edificis i millora de carrers en el sector del centre històric més proper a la catedral. Així, per exemple, entre el 1927 i el 1928 es van restaurar les cases dels Canonges i el palau Episcopal, s’urbanitzaren la plaça de Ramon Berenguer i la plaça de Garriga i Bachs, es va restaurar la façana gòtica de l’Ajuntament i es va construir el pont gòtic del carrer del Bisbe. Tota aquesta activitat quedà institucionalitzada mitjançant la creació, al mateix 1927, del Servei de Conservació i Restauració de Monuments Històrics de l’Ajuntament” (Ganau, 2003: 268).*

In that same year, 1927, Milà i Camps commissioned the provincial architect Joan Rubió i Bellver for a new project for the Cathedral quarter which he entitled “Taber Mons Barcinonensis”. He employed monumental criteria similar to those of Sitte. He highlighted elements which were to disappear (mainly the non-gothic ones), be conserved, or modified. In addition, he presented a vision of the old quarter without the irrelevant buildings to enable a better view and perspective of the main neo-Gothic buildings and monuments. But the project was highly controversial and was received with major oppositions regarding the demolitions and the finishes and features used

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<sup>83</sup> Josep Vilaseca i Casanovas municipal architect and professor in the Escola d’Arquitectura de Barcelona, director of the Servicio para la Conservación y Restauración de Monumentos, and responsible for many projects and plans in the city like the Arc de Triomf created for the 1888 Universal Exposition.

(Busquets, 2003; Torres, Llobet, Puig, 1985). According to Florensa the strong protests that Rubió i Bellver's proposal faced had prevented great damages to the quarter, and from this controversy the name "Gothic Quarter" was born "*de la polémica que se suscitó nació la denominación de "barrio gotico"*" (Florensa, 1958: 23).



Fig. 90 Taber Mons Barcinonensis (Rubió i Bellver, Marià 1927)

Despite this, it was in that same direction that from 1921 to 1928 Rubió i Bellver continued the work of Jeroni Martorell on Casa dels Canonges, and for the occasion of the 1929 Universal Exposition he built the famous neo-gothic bridge of Carrer del Bisbe<sup>84</sup> that linked the house to the Generalitat Palace.

And this controversy made the slogan 'Gothic Quarter' (Cócola, 2010) even more appealing which in reality "*no es gòtic*" and does not correspond to the architectural reality of the neighborhood as explained by Florensa. The only gothic buildings there were the Cathedral and Santa Àgata Chapel, and the rest were outside the Cathedral neighborhood like Santa Maria del Mar among others.

*"Los grandes monumentos góticos, Santa María del Pino, Santa María del Mar, Atarazanas, el Hospital de la Santa Cruz, están fuera del barrio, y dentro de él hay romano, románico, barroco, neoclásico y abundan las casas del siglo XIX, discretas pero anodinas y desde luego nada góticas. ¿Por qué se ha generalizado el nombre? Es puramente turístico;*

<sup>84</sup> Carrer del Bisbe was also important and strategic for the 'Gothic Quarter' policy and it witnessed transformations in its pavement, as well as the rest of the old town, the first during the 1929 Universal Exposition and the second, on the occasion of the 1952 XXXV Eucharistic Congress. Those two events were incentives for remodeling and transformations in the 'Gothic Quarter' especially concerning the pavements. For further information on this matter refer to Danae Esparza Lozano's PhD thesis (2014) 'El diseño del suelo: el papel del pavimento en la creación de la imagen de la ciudad.'

*no hay propaganda en el extranjero ni itinerario turístico que no se llena la boca con el «quartier gothique». Es como el «barrio chino también» de Barcelona que algunos escritores hicieron popular después de la guerra europea de 1914-1918 y en el que seguramente no habitaba ni un solo natural del Celeste Imperio, a diferencia de los de Nueva York y San Francisco de California” (Florensa, 1958: 11).*

And from Plaça San Just “salen calles que son mucho más góticas que todas las del barrio de este nombre; así las de la Palma de Sant Justo y sobre todo la de Lladó, que presenta tres o cuatro casas notables, hoy muy maltratadas, pero que podrían restaurarse fácilmente...” (Florensa, 1958: 19).

However, this referred-to slogan is what made the city successful; it helped in esthetically monumentalizing the historic center and offered the whole city a touristic, symbolic and historic place. The restorations’ impact on tourism was similar as that of Viollet Le Duc’s Carcassonne or Buls’s Grand Place.

*“El eslogan turístico al que hacía referencia Florensa es, sin duda, el que más éxito ha tenido. El Barrio Gótico se convirtió, hasta la reconsideración de las últimas décadas, en el espacio histórico y simbólico por excelencia de Barcelona durante muchos años” (Nicolau, Fuster, Venteo, 2001: 233).*

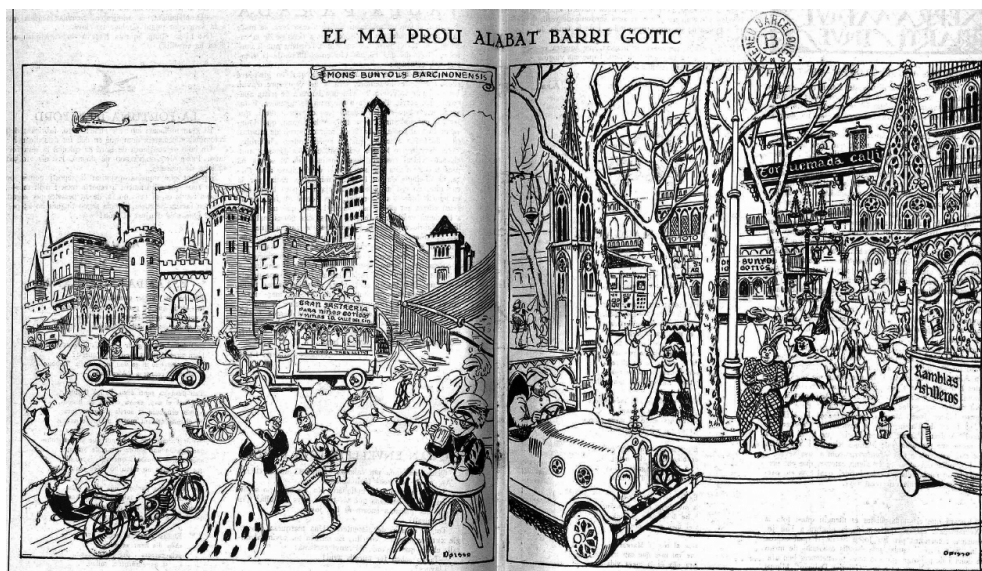


Fig. 91 “The never enough praised Gothic Quarter (Opisso 1927)

Florensa added that the constant restoration of the monumental neighborhood brought new life to the whole area especially that inhabitants had been for quite some time leaving the degraded old town for more modern neighborhoods. Conserving and reclaiming its monuments and spaces increased tourism which in return had a positive effect on the economy and profits:

*“El conservar los monumentos y los conjunto artísticos es un deber ineludible de todo país civilizado; pero con la boga moderna de los viajes y del turismo, no va resultando ya*



*una operación tan de lujo como se creía. En Barcelona, hace quince años, calles céntricas del casco antiguo, que habían sido a finales del siglo pasado el centro del comercio más activo, estaban en plena decadencia porque la vida de la ciudad se trasladaba a otros barrios más modernos. Este movimiento no ha cesado, sino que se ha acentuado cada vez más; pero la constante recuperación del barrio monumental ha llevado una nueva vida a aquellas zonas, porque los turistas, entre admiración y admiración, compran; y, como es natural, compran en los alrededores de los monumentos que van a admirar. Lo que las ciudades empleen, pues, en contribuir a la salvación y conservación de sus bellezas, no es esfuerzo perdido; aparte de cumplir un deber, pueden obtener a la vez un beneficio, que también en esto la buena acción lleva consigo su recompensa” (Florensa 1955: 416).*

Later, Florensa became in charge of the Gothic Quarter policy –before and after the 1936-1939 Civil War–and in addition worked on other plans and project in the old town but outside the quarter. He dedicated 35 years to the conservation and restoration of the old town and in later years Oriol Bohigas (1969) stated that the monumental Barcelona of nowadays is Florensa’s own product.

The transformation of the neighborhood was under three norms which are a reminder of what Rucabado wrote in 1911 on recreating the historic neighborhood:

First, restoration, “*restaurar y dignificar adecuadamente los monumentos y edificios que dan valor al barrio*” such as the Diputació, City Hall, and giving value to the Roman Walls among others; second, completely dismantling and relocating buildings “*procurar, siempre que de un modo «inevitable» se haya de suprimir o desmontar algún edificio o elemento de valor histórico o artístico, volver a montarlo en el barrio gótico*” such as Florensa’s work on the 16<sup>th</sup> century Casa Padellàs<sup>85</sup> relocated in Plaça del Rei, and 16<sup>th</sup> century façades of Casa del Gremi de Calderes and Casa del Gremi de Sabaters relocated in Plaça Sant Felip Neri among others; and third, total or partial demolition of irrelevant buildings to “*armonizar lo insulso*” replacing them by new monuments with reconstructed neo-gothic façades using stored architectural materials saved from the demolitions of the Via Laietana such as the three houses behind the apse of the Cathedral (Florensa, 1958: 23, 24).

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<sup>85</sup> The work on the house was completed in 1943, and since then the building houses the City Historic Museum.



**Fig. 92** On the left Casa Padellàs reconstructed in Plaça del Rei, on the right same square during excavations (Florensa 1959c)

The projects were mostly directed by Florensa and Vilaseca –through the ‘Servicio’ itself– with the involvement and help of Agustí Duran i Sanpere director of the ‘Instituto Municipal de Historia’ (Municipal Institute of History) and the collaboration of Nicolau Maria Rubió i Tudurí director of the ‘Dirección de Parques y Jardines’ (Department Parks and Gardens). Furthermore, many important names played a significant role in monumentalizing the Cathedral neighborhood which included Domènech i Montaner, Puig i Cadafalch, and Jeroni Martorell, among others, and all influenced by anterior historic models such as the master works of Viollet le Duc, Camillo Sitte, and Charles Buls (Tatjer, 1998; Peiró, 2002).

They also worked on many open spaces and squares to add more embellishment, hygiene, and value to the new monuments as in the excavation projects in Plaça del Rei, the recreation of Plaça Sant Felip Neri and the creation of Plaça de Berenguer el Gran which will be discussed ahead.

The projects and their policies received support from all local authorities along the decades from the Lliga Regionalista, and the left-wing of the Second Republic to the francoist mayor Josep Maria de Porcioles. As a matter of fact, among all the plans and proposals for the old town, only Florensa’s plans and punctual interventions in the Gothic Quarter and the old town were carried out (Tatjer, 1998).

*“Des de l’any 1927, aquesta veritable poilitca del Barri Gotic, la va dirigir fermament Adolf Florensa, que marcara els criteris de consrvacio i restauracio de monuments del centre historic durant els prop de quaranta anys següents, mantenint-se, quasi immutable, a traves de regims i dirigents polítics, de la Manocomunitat a la dictadura franquista passant per la de Primo de Rivera, la Republica i el període revolucionari de la guerra civil”* (Nicolau, Venteo, 2001: 117).

## Towards the Esponjamiento

### Plan Vilaseca

In 1932, the municipal architect Josep Vilaseca presented a new reformation plan under the name 'Plano de reforma y urbanización y de enlace entre los puntos singulares del Casco Antiguo de la ciudad' (Reform, urbanization and connection Plan between singular points of the old town) that involved a thorough transformation of the old town. The first objective of the plan was to solve traffic problems, thus, Vilaseca studied the city's circulation needs and suggested a street network which connected the city's points of interest. And the second was to save as much monuments as possible so he overlapped the avenues on existing ones that passed across land of less value hence leaving many of the old town's areas intact. He retraced a Via C similar to that of Darder's except that it passes from Pla de la Boqueria instead of Carrer Portaferriassa. And Via B similar to that of Cerdà's but when it reaches Carrer de Sant Pau it splits into two branches one leading to Portal de la Pau leaving the Drassanes untouched, and the other to Paral.lel.



**Fig. 93** Vilaseca's plan drafted in 1930 in which he drafted by collecting ideas from a contest lauched by the City Council in 1927. (Vilaseca, 1930) *"Aplica la metodologia de les vores laterals, però, quan la nova avinguda es el resultat de l'eixamplament d'un carrer nomes defineix la franja d'expropiacio a on costat. Redueix molt les afectacions de vialitat. Deixa intactes moltes zones del casc i defineix una xarxa de carrers nova que se superposa a l'existent. Es com si prioritariament volgues resoldre on problemade trafic. En llocs emergents d'aquesta trama s'hi situen conjunts monumentals, els quals, sovint, però no sempre, inclouen un monument de caracter històric- artistic. Significativament, la majoria d'aquests punts emergents son estudiats en perspectiva. A vegades la perspectiva és aerea, posant l'èmfasi en l'aspecte monumental. En altres casos la perspectiva es a nivell de carrer i té connotacions més ambientals"* (Torres, Llobet, Puig, 1985 : 185).

Unlike Baixeras, Vilaseca traced his streets in a rational way maintaining the organic sense of the city and destroying only when necessary (Torres, Llobet, Puig, 1985). With this network he gave emphasis on monumental buildings and areas and highlighted their historical and artistic character following by that the general outlines of Jeroni Martorell's 1926 plan (Busquets, 2003; Peiró, 2002).

*“El pla per el Barri Vell torna a ser un projecte global per al conjunt de Ciutat Vella i pretén millorar-la i, sobretot, adaptar-la a les dificultats creixents sorgides arran del desenvolupament del trànsit a l'interior de la ciutat. És la provisió d'aquest factor el que fa necessari tornar a introduir en aquest projecte una visió més general, la qual ha de tenir en compte les diverses relacions d'accessibilitat, cada vegada més importants, que cal establir entre els diversos barris del centre històric i, així mateix, entre aquells i la resta de la ciutat. És a dir, l'objectiu és doble i alhora ambiciós: facilitar la circulació per l'interior de Ciutat Vella i mantenir-ne l'estructura urbana definida pels monuments i edificis més representatius, en la línia defensada ja amb anterioritat per Jeroni Martorell” (Peiró, 2002: 43, 44).*

The plan was passed by the city council in 1934 and a year later by the 'Comisión Superior de Sanidad' (Superior Health commission). But again it was difficult to be carried out for similar reasons as the other plans before it.

It was still an expensive procedure and it was inevitable for the plan not to affect many other properties and historical buildings despite of saving a big number of monuments. Moreover, what affected the Plan Vilaseca were several other circumstances that happened in the 1930s that *“witnessed major transformations and new approaches in the territorial and urban realm”* (Busquets, 2005: 233). First, the 1929 Exposition had ended and at the same time the beginning of the Great Depression was affecting the economy and industrial trade nationally and internationally; second, the proclamation of the Second Republic in 1931 and the triumph of the leftists in the municipal elections; third the increase in population density resulting in lack of dwellings, facilities, services, transportation, infrastructure and open space; and fourth and most significant are the rise of new prospects and urban strategies such as:

- 1- The Modern Movement's CIAM, the Athens Charter, the GATEPAC (Grupo de Artistas y Técnicos Españoles Para el Progreso de la Arquitectura Contemporánea) and the GATCPAC (Grup d'Artistes y Tècnics Catalans per al Progres de l'Arquitectura Contemporània)<sup>86</sup>.
- 2- Gustavo Giovannoni's 'diradamento' 1931

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<sup>86</sup> They were the Spanish and Catalan branch of the Le Corbusier's C.I.A.M, and their most famous members are Josep Lluís Sert, Antoni Bonet Castellana, Josep Torres Clavé, José Manuel Aizpurúa and Fernando García Mercadal. They published the famous magazine A.C., or 'Actividad Contemporánea' of which 25 issues were published between 1931 and 1937. They collaborated with Le Corbusier and Pierre Jeanneret, where the first started visiting Barcelona frequently after 1928 and in 1932 It was a very important time in Barcelona hosted the preparatory meetings of 4<sup>th</sup> CIRPAC Congress.

3- The series of projects and operations in the old city directed by Adolf Florensa between the 1930s and 1950s (noting that most of these projects were created by both Florensa and Vilaseca).

The three had one thing in common: that of 'esponjamiento' or punctual selective destruction through small-scale public spaces.

*"By the time this project appeared, it was already outdated. Once the need for regulations appeared, the issue of the smaller-scale fabric of the old town was introduced"* (Busquets, 2003: 124).

It wasn't until after the Civil War that the Plan Vilaseca was revised, especially that directly after the end of the war, the Francoist authorities were busy reconstructing the areas destroyed by the bombings. On March 9 1939, the new mayor Ignacio Ventosa declared to take advantage of the damaged buildings and free spaces, resulting from the bombings, and convert them into open public spaces especially in Barceloneta and District V: "[...] Ignacio Ventosa, va declarar en l'acte constitutiu d'aquesta ponència [...] que pensaven "proyectar urbanizaciones adecuadas en las zonas perjudicadas por la Guerra, aprovechando los espacios libres producidos por el derrumbamiento de las edificaciones, muy especialmente en la Barceloneta I el distrito V"" (Fabre, Huertas, 1988: 317).

In 1941 Vilaseca made a general revision to the plan and proposed numerous corrections in the intent of giving it more feasibility, of assimilating, gathering and adapting the best elements from the previous proposals and of decreasing the affected parts in the western part of the city. This new version was approved in 1943 and it became a reference to several urban regeneration policies until its revision in 1959.

*"Aquesta és, com s'ha dit, la versió oficial aprovada per l'Ajuntament, vigent amb petites modificacions al llarg de quasi tres dècades i, per tant, de referència per a moltes de les actuacions dutes a terme després de la guerra civil i abans de la revisió posterior, el 1959"* (Peiró, 2002: 48).

## GATCPAC

The GATCPAC's proposals and ideas contradicted and collided with that of Vilaseca's: *"En 1934 i 1937 el GATCPAC va criticar aquest projecte acadèmic, tot proposant una solució alternativa, en la qual se suggeria la substitució de les vies per jardins i centres d'equipament."* (Torres, Llobet, Puig, 1985: 185).

In their Macià Plan 1932 and 'Plan de Saneamiento' or Sanitation Plan of District V 1937 they proposed an alternative model of sanitation for the old town. And along these lines they created in 1938 the 'Dispensario Central Antituberculoso'<sup>87</sup> (Central Antituberculosis Dispensary). They rejected tracing rectilinear vias as well as historical restorations (Torres, Llobet, Puig, 1985). Unlike the former Plans, that proposed an 'eventrement' or 'opening up' with road axes, the GATCPAC projected a different approach for Ciutat Vella

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<sup>87</sup> It was created by the GATCPAC members Josep M Sert, Josep Torres Clavé and Joan Baptista Subirana.



(Busquets, 2003) that of selective demolition and open urban spaces: *“Mucho más esencial que la creación de estas vías (que no resuelven ningún importante problema de tráfico y que, en cambio, crean nuevos conflictos, atrayendo dicho tráfico hacia la ciudad vieja en lugar de desviarlo de ella) es el problema de la higienización de la Barcelona infecta que el GATEPAC considera mucho más importante que el proyecto de enlace de monumento”* (GATEPAC, 1934: 20).



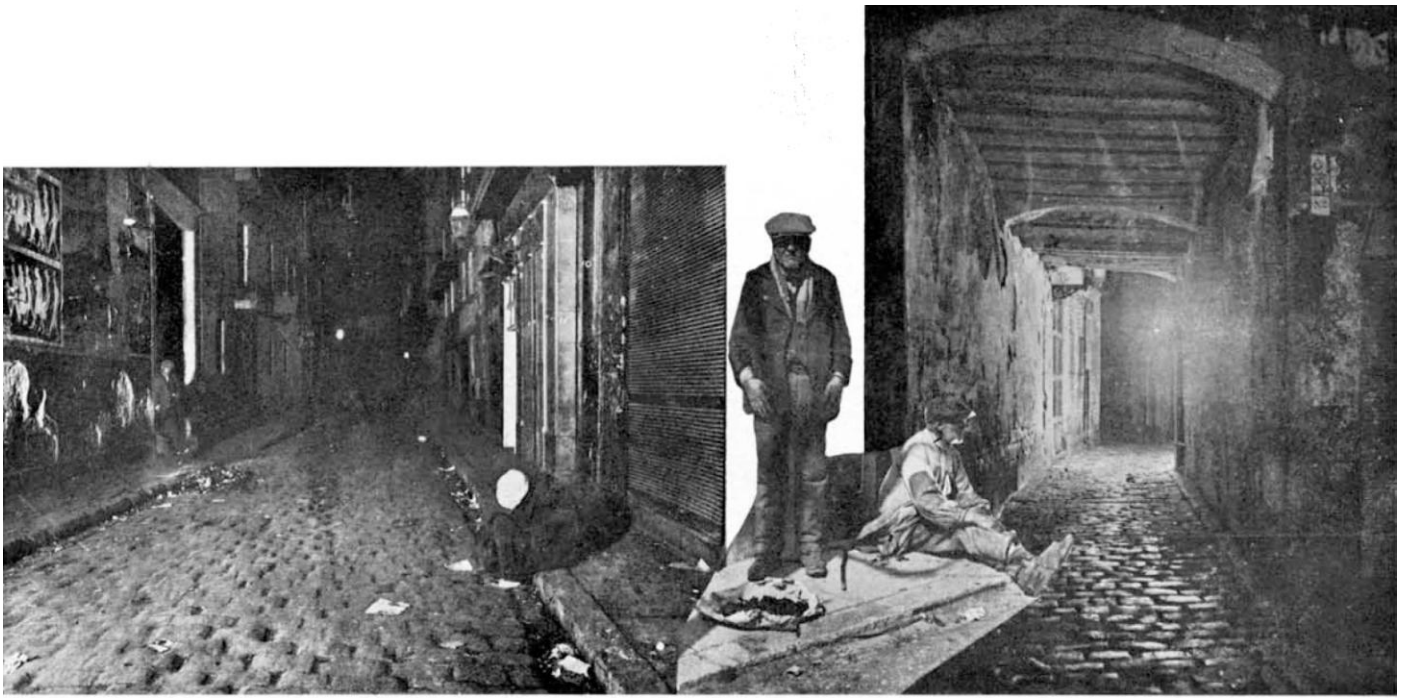
**Fig. 94** GATEPAC's cover issue A.C no.6 in 1932 on the District V also known as the Barrio Chino, nowadays the Raval (GATEPAC, 1932)

They studied the situation of the old town especially District V (Raval) known also as the “barrio chino”, that has become very dense and contagious. The open spaces, patios, gardens, and plazas disappeared making way for unorganized, cheap housings. Many of the streets were full of mountains of garbage dumps and high constructions leaving no space for trees, ventilation, clean air and sunlight.

*Por imperativo de la profilaxis más elemental, debemos evidenciar hoy el cáncer barcelonés del llamado “barrio chino” como caso clínico - “típico” - existente en casi todas las grandes urbes.[...] En la mayoría de estos casos se cometió el grave error de conservar la casi totalidad de la vieja ciudad, la estrechez de sus calles y las condiciones absolutamente antihigiénicas de sus viviendas. Después, al añadir nuevas plantas a estas casas lóbregas y apiñadas (“respetando” en las de cinco pisos los mismos absurdos patios de ventilación que tenían las de dos plantas), al edificar lo que antes eran huertos y solares, sin pensar en alterar el insuficiente sistema de cloacas ni los primitivos medios higiénicos, etc., las viviendas de estos barrios descendieron a la categoría de antihumanas.[...] Hoy, con un buen plan de construcción de habitaciones económicas, podría iniciarse la destrucción de las calles atacadas de mayor mortalidad, procediendo inmediata y simultáneamente a la lausura de las viviendas de estas calles, que acusan la terrible cifra de un 20% (!) de defunciones [...]”* (GATEPAC, 1932: 31-33).

All these aspects were leaving the area as a nucleus for infections and causing a lack of hygiene, and well being. They argue that the primary problem of the old town is not that of circulation or aesthetics but a sanitation one and neither expanding streets nor narrowing sidewalks would solve the problem.

*“La Barcelona vieja, a vista de avión, revela un laberinto de infectas callejuelas a las que, debido a las construcciones, relativamente elevadas, no llega jamás un rayo de sol. Carencia absoluta de arbolado. Los terrados sirven de corral o almacén de trastos viejos. Unos puntitos negros indican los ‘patios de ventilación’. Pozos donde no entra el sol ni el aire circula. Un gran número de ventanas da a estos patios; mezquina ventilación, sin aire ni luz” (GATEPAC, 1937: 19).*



**Fig. 95** Overpopulation, insalubrity, dark unventilated streets and high mortality in District V (GATEPAC, 1937)

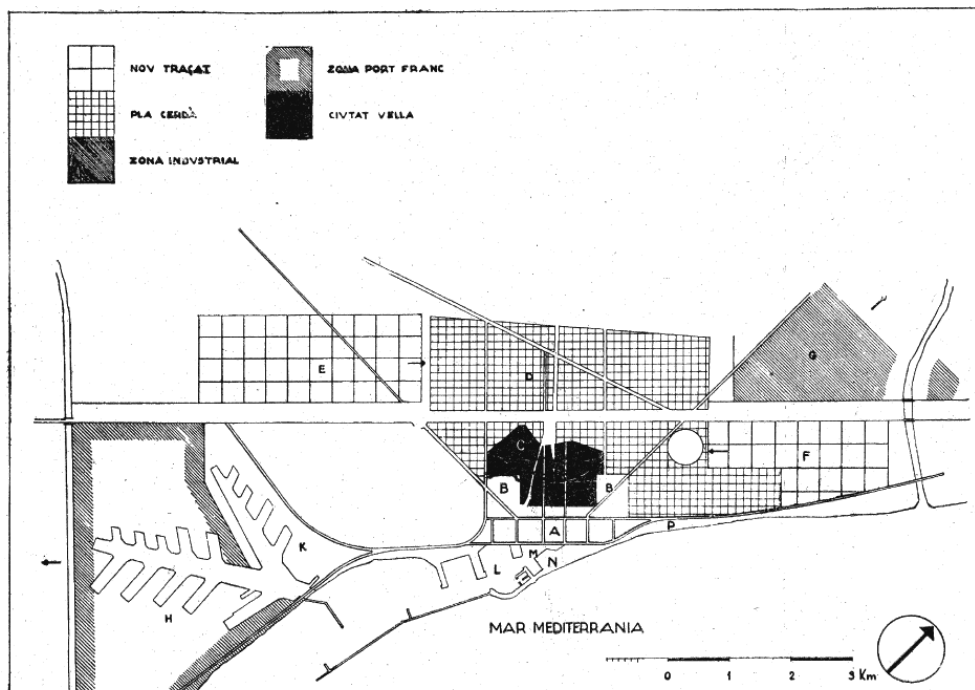
Their solution for overpopulation, sanitation and hygiene was through performing a kind of surgery on certain specific points in the urban fabric. They urged expropriation and selective destruction of housings and buildings that they called “*antihumanas*” and “*anithigienicas*” (GATEPAC, 1932) through a plan carried out in stages. The infected buildings and spaces should be dismantled and ‘surgically’ replaced by new public spaces, and equipments thus, providing the citizens with open spaces, trees, clean air, ventilation and sunlight all the while preserving the city’s historic and artistic monuments.

*“Es una intervención más de cirujano, que de arquitecto. Urge extirpar de raíz los focos más peligrosos de infección. Hay que demoler cuanto antes las agrupaciones de viviendas*

que acusen, según estadísticas, mayor mortalidad. En su lugar quedara un gran espacio libre donde la naturaleza pueda enmendar los abusos o errores de una civilización. [...]

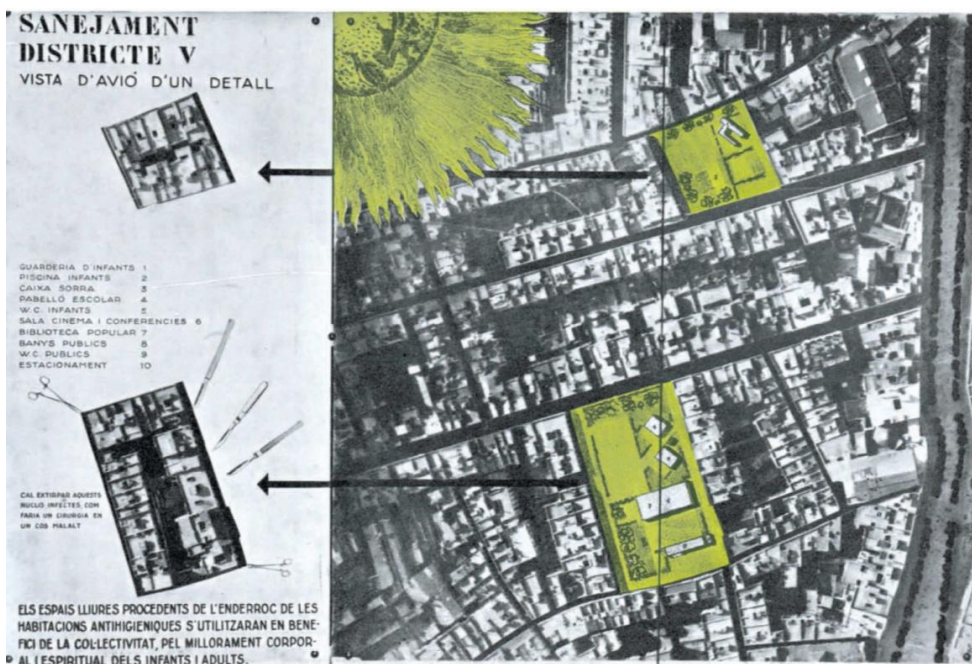
Opinamos que debe exigirse una intervención, mas de cirujano que de arquitecto, que extirpe de raíz, demoliendo cuanto antes las viviendas que según estadísticas, acusen mayor mortalidad, de acuerdo con un plan realizable por etapas. En los espacios que dejaría libre esta demolición, debe procurar el Municipio enmendar los abusos y errores de una civilización, dejando que penetre el sol, plantando árboles y edificando pequeños pabellones de utilidad colectiva (escuelas, bibliotecas infantiles, guarderías, etc.)" (GATEPAC, 1934: 17-20).

"El modelo regeneracionista se formula más adelante a partir de la crítica que arquitectos vinculados al movimiento moderno realizan a estos últimos modelos, de los que destacan, además de su anacronismo su escasa sensibilidad hacia los problemas de vivienda y de salubridad de un tejido histórico que había absorbido entre 1915 y 1930 una fuerte inmigración alcanzando densidades de población casi infrahumanas. Se trata el Pla de Sanejament del Casc Antic propuesto por el GATCPAC entre 1935 y 1937; dicho plan preveía derribos selectivos de manzanas insalubres, esponjamiento y creación de equipamientos higiénico, culturales de carácter local en el marco de la lucha contra la insalubridad y con una fuerte intervención pública, lo que era posible al haberse decretado en 1937, durante la guerra civil, la municipalización de la propiedad urbana" (Tatjer, 1998: 18).



Zooning. — Esquema I

Fig. 96 Schematic plan of a new zoning layout and general developments (Le Corbusier, Jeanneret, GATEPAC, 1934)



**Fig. 97** Pla de Sanejament for Ciutat Vella suggesting selective small-scale destructions of non-hygienic buildings, instead of rectilinear roads, and replace them with open squares and green spaces (GATEPAC, 1937)



In the GATCPAC's petition presented to the City Council they insisted that the solution is not expanding roads which will only benefit buildings overlooking them leaving the rest of the city in a deplorable situation and unaffected by the reform, and stressed on the fact that the best solution for hygiene is strategically creating open and green spaces in the most infected parts of the old town and include in them collective services.

*“Es por esto que nosotros propugnariamos la creación de espacios verdes en los puntos más infectados del casco antiguo derribando alguna de las manzanas actuales que estuviesen en peores condiciones, procurando que los espacios libres resultantes, fuesen estratégicamente situados para mejorar el mayor número de viviendas posible” (Tarragó i Cid, 1980-05: 75)*

*“En estos espacios libres resultado del derribo de las viejas construcciones antihigiénicas, además de los pequeños parques se instalarán servicios colectivos de primera necesidad [...]” (Tarragó i Cid, 1980-05: 77).*



**Fig. 98** A fragment of the 'Diorama de la Nova Barcelona' in 1934. It clearly show the destruction of an important part of Barcelona's historical center, in particular the Barceloneta. (GATCPAC, 1934. COAC)

As for Florensa, those same ideas influenced his work in the old town and are reflected in his interventions and proposals for the Gothic Quarter, Raval, and Ribera neighborhood. By those years the Gothic Quarter had become an important touristic element and Florensa along with Duran i Sanpere were actively improving and enhancing the quarter's capacities. Busquets pointed out that Florensa's layouts for the Gothic Quarter and the neighborhood of La Ribera *"rejected the idea of renovation in the form of building broad new streets for greater traffic access, so far implicit in plans for the old town"* (Busquets, 2003: 128).



Despite the idealization of Viollet-le-Duc in Barcelona, Florensa was more influenced with the works and ideas of the Italian architects Camilo Boito<sup>88</sup> and Gustavo Giovannoni<sup>89</sup> concerning heritage, restoration of monuments and their surroundings, and reformation of the urban fabric. His approach to restoration and conservation of monuments was more flexible: *“no hay reglas invariables y que el gusto y el criterio del restaurador deben escoger en ciertos momentos, a reserva de aguardar resignado las críticas, que nunca faltarán”* (Florensa, 1956: 135).

Boito was the author of numerous projects, publications and conferences and his ideas even influenced the 1902 Italian Law drafted for the preservation of monuments and artistic objects. One article of this law gave special attention to the surrounding environment of monuments by not obstructing their perspective with new constructions. And it wasn't until the 1930s, at the hands of Giovannoni, that his ideas started to be implemented internationally. And Giovannoni in his turn developed the 'Carta del Restauro Italiana' (1931) that was in accordance with the 1931-1933 Athens Charter and became a key milestone and model for many European cities especially after the Second World War.

*“La destrucción de tugurios en los alrededores de los monumentos históricos dará ocasión a la creación de superficies verdes. Es posible que, en algunos casos, la demolición de casas y tugurios insalubres en los alrededores de un monumento de valor histórico destruya un ambiente secular. Eso es lamentable, pero inevitable. Podrá aprovecharse la ocasión para introducir espacios verdes. Los vestigios del pasado se bañarán con ello en un ambiente nuevo, acaso inesperado pero ciertamente tolerable, y del que, en todo caso, se beneficiarán ampliamente los barrios vecinos”* (Le Corbusier, 1942: 107).

*“Gustavo Giovannoni, la principal figura italiana de després del canvi de segle que contiunua els estudis i la labor del gran mestre que fou Camillo Boito. [...] [Giovannoni] dedicat a la restauració des de la docència, gaudi d'una bona fama a partir dels anys vint i fou el promotor de la Carta del Restauro Italiana, la qual es redactà d'acord amb els principis de la Carta d'Atenas del restauro, el mateix any 1931 [...] La Carta del Restauro Italiana es basà, com dèiem, en l'esforç personal de Giovannoni, i va ser una fita fonamental per estendre la divulgació de la restauració del patrimoni a Europa i un model per a molts altres països. (Peiró, 2002: 40, 41). I aquesta és una via que, en diversos països, no es troba gaire allunyada de la proposada pel Moviment Modern en la Carta d'Atenes, una línia endegada a Catalunya amb la proposta del Pla de Sanejament de l'any 1937 formulada pels membres del GATCPAC assistents al Congrés del Cirpac; per més*

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<sup>88</sup> Camillo Boito architect, engineer and art critic. Professor of architecture in Milan's Brera Academy and known for his extensive architectural restorations. In the 'Prima Carta del Restauro' in 1883, he presented a reconciliation of ideas of restoration to try to reconcile his conflicting views with that of Viollet le Duc and Ruskin.

<sup>89</sup> Gustavo Giovannoni architect and urbanist. He directed the School of Architecture of Rome and worked on issues of urban hygiene and restoration.

*que, per desgràcia, la Llei del patrimoni historicoartístic espanyola no es publicà fins a l'any 1933 i amb un tarannà molt diferent del cas Italià analitzat fins aquí, del qual tantes influències rebé Adolf Florensa” (Peiró, 2002: 43).*

## **Florensa and Giovannoni**

Giovannoni's basic principle of restoration is taking into consideration the surroundings of monuments and respecting the city's character and features, an issue also studied by Camillo Sitte in his 1889 book 'City Planning According to Artistic Principles.'

In his book 'L'urbanisme face aux villes anciennes' –originally published as 'Vecchie città ed edilizia nuova' in 1931<sup>90</sup>–, he explained the 'eventrement' procedure and the different uses and forms of longitudinal and transversal roads. His general opinion on them is that they are harmful and illogical when used in interior reformation and he mostly puts the blame on the ambitious ideas and errors of our absolute laws, outdated administrations and speculators' interests:

*“...el fa condemnar de manera explícita els 'esventraments', els quals l'any 1913 ja considerava 'il·lògics i ineficaços [...] i posats de moda no per raons higièniques, sinó per l'especulació edilícia i el [culte] a l'especulació privada” (Peiró, 2002: 42)*

However, this does not mean that we cannot change or improve anything in the old heart of the city. Cities, in general, and old town centers, in particular, suffer from complex and delicate problems in their different aspects –social, economic, hygienic, circulation, and overpopulation– that cannot be solved with a few sketches or pickaxes, but require careful work, preparations and a thorough knowledge of the city.

Giovannoni stressed that when, in some cases, 'eventrement' is inevitable, it first needs to integrate with the city's topography and artistic character; second, the roads created should not be intended for intense inter-districts displacements; third, they cannot be designed as large and heavy-circulation arteries; and fourth, their width should be considerably limited and the new buildings on their sides should have limited heights. Because otherwise and in the opposite case, with their size and their “*masses gigantesques*”, they would oppose the city's urban fabric, and imprison and choke the neighborhoods behind them as was the case with the Rettifilo in Naples (Giovannoni, 1998: 270).

Giovannoni argued that before developing any of these projects, their advantages disadvantages and consequences should be evaluated and studied with precision especially that it is a delicate complex procedure where a patient and methodical study is called for. He gives the example of Barbera, the internal reform plan of Rome, stating that despite the fact that the two traced arteries would link the city from north to south and west to east leaving the old and historic neighborhoods of the city intact, the commission

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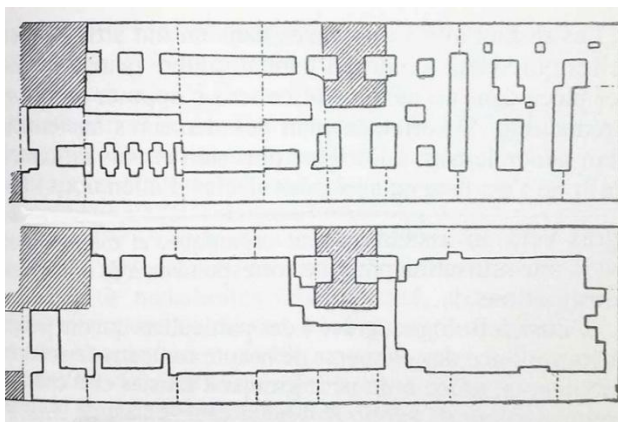
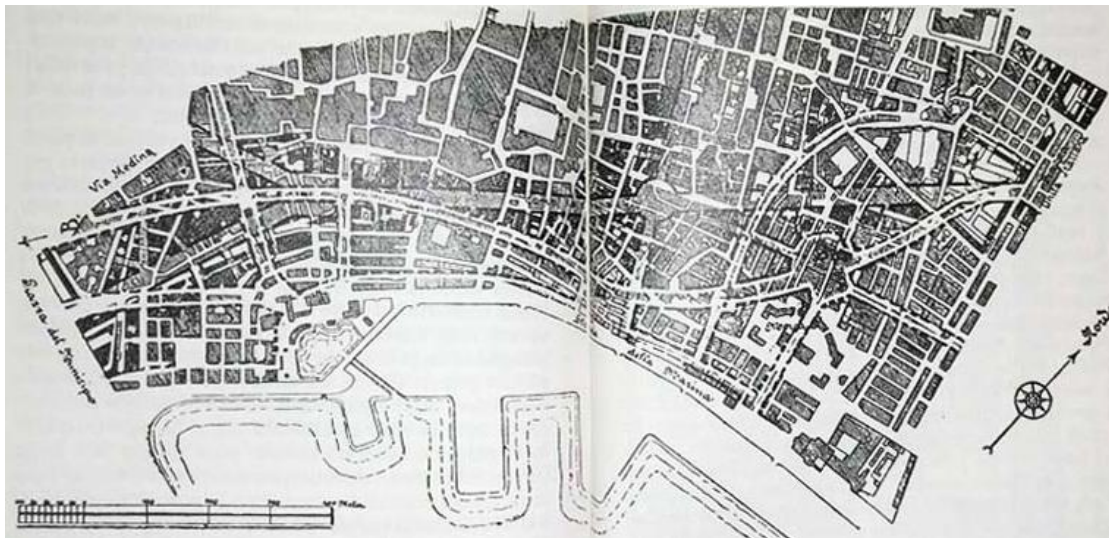
<sup>90</sup> Giovannoni's book 'L'urbanisme face aux villes anciennes' was originally published as 'Vecchie città ed edilizia nuova' in 1931 and republished to a second edition in 1998 with an introduction by Françoise Choay.

that was studying the plan still preferred to construct small and multiple arteries in both directions.

*"Chacune de ces deux solutions présente des avantages et des inconvénients, et la seule façon de les évaluer avec précision aurait été de pouvoir connaître avec exactitude leur conséquences. Tout cela montre à quel point les problèmes posés par la traversée d'une ville sont difficiles, délicats, complexes, parfois impondérables; ils ne peuvent être résolus à coup d'impulsions irréfléchies et de grandes phrases, mais appellent une étude patiente et méthodique, fondée sur l'observation et sur des prévisions coordonnées (Giovannoni, 1998: 271).*

Moreover, they should be compliant to the financial, historic and artistic dimensions as well as adapt to their existing surroundings where a rectilinear, curved or irregular artery depends totally on the city's topography and urban fabric.

*Il faut que les artères traversantes correspondent à la ligne moindre résistance sous tous les aspects urbanistiques, mais en particulier en ce qui concerne le financement ainsi que la dimension historique et artistique " (Giovannoni, 1998: 272).*



**Fig. 99** Above draft showing in dotted lines a curvilinear arterial section and related pathways replacing the Rettifilio in Naples. Below are Giovannoni's before and after drafts of a group of buildings on Via Emanuele Filiberto, Rome demonstrating an 'eclaircissage' operation that resulted in interior gardens (Giovannoni, 1998)

Giovannoni was the first to introduce the Diradamento Theory,<sup>91</sup> or 'eclaircissage' in French, that is an urban interior reform based on a strategic and punctual method of 'selective destruction', or 'esponjamiento' in Spanish, instead of 'eventrement'. Giovannoni proposed a dynamic approach which allows old urban fabric to adapt to the contemporary life while respecting its style and context. Through the 'diradamento' he defines and legitimize some types of mild and precise interventions that allows ventilation through the creation of small public spaces and gardens that improves the conditions of health and social living while maintaining the aesthetic quality (Choay, 1998).<sup>92</sup> In other words, it ensures the conservation of most of the urban fabric, atmospheres and historic monuments and at the same time decreases insalubrity and density both important for the old town.

The word 'diradamento' or 'eclaircissage' means 'thinning out' and is actually a term used in agriculture and Giovannoni implements it in the urban context as a metaphor. He compares it the farmer's horticultural technique of 'pruning' and 'grafting' which helps reviving and re-sprouting old plants.

*"La destruction est remplacée par un travail avisé d'adaptation, exactement comme, dans une plantation, le bon agriculteur procédé à de délicats travaux d'émondage et de greffe qui permettent aux vieilles plantes de bourgeonner à nouveau"* (Giovannoni, 1998: 297, 298).

He argues that his theory is characterized by three principles or guidelines; hygienic, social, aesthetic, and economic values that are interrelated and go hand in hand and he provides the following solutions:

1. Sanitary conditions: population density should be reduced and air and light should be brought in and heights of buildings should be controlled.
2. Social conditions: brothels, disreputable taverns and hotels should be eliminated.
3. Aesthetic and economic value: artistic and historic elements and monuments should be restored, and streets and public spaces should be embellished with urban furniture, trees, vegetation, fountains, etc.

He terms it as a delicate, punctual and strategic procedure that should be accomplished with 'patience and love'. That is, knowing where and where not to apply this procedure is an important matter; therefore, the old town should be carefully studied and analyzed before strategically choosing the affected areas.

It is characterized by its irregularity of demolishing few buildings, opening spaces, and restoring façades here and there, because sometimes small changes is all that is required to fix the problems of an old town. He gives examples in Rome, Padua, Trieste, Bari, and

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<sup>91</sup> This concept was extensively developed by Gustavo Giovannoni since 1913 in the journal *Nuova Antologia*, vol. XLVIII, n 996, entitled <"Il diradamento edilizio dei vecchi centri": il quartiere della Rinascenza in Roma>. Giovannoni borrowed it from the botanical field as a metaphor to express the urban impact of this concept on the city especially that of grafting (innesto).

<sup>92</sup> Françoise Choay introduction in Giovannoni, Gustavo. *L'urbanisme face aux villes anciennes*. Seuil: 1998.

as well as of his case studies and projects in Salicotto quarter in Sienna, and Renaissance quarter in Rome.

*“Tout cela doit être accompli «avec patience et amour», sans vouloir en faire trop et sans changer fondamentalement le type et l’ordre du quartier; il faut pratiquer des interventions ponctuelles et non des aménagements linéaires, procéder par petites touches locales et sans utiliser les grands moyens, en dégagant sans ajouter, en améliorant sans transformation radicale. [...] Cet aménagement se caractérise non par l’uniformité et la régularité des voies nouvelles, mais au contraire par leur irrégularité : on démolit ici ou là un bâtiment ou un groupe de maisons en créant à la place une placette pourvue d’un jardin, petit poumon dans le quartier ancien, puis la voie se rétrécit pour s’élargir bientôt de nouveau, introduisant de la variété dans le mouvement et associant des effets de contraste au type urbain originel, qui conservera ainsi intégralement son caractère artistique et contextuel. On y aura seulement introduit un rayon de soleil, ouvert quelques nouvelles perspectives et fait respirer les vieilles maisons trop rapprochées” (Giovannoni, 1998 : 285, 286).*

It is a theory that contributed in the maintenance of the built city, the importance of the neighborhood, the recovery of monuments and reuse of buildings and creation of small open spaces for historical, artistic, hygienic, and economic reasons and it was subsequently accepted by many cities.





Fig. 100 Plan of the Gothic Quarter delimited with blue lines and its touristic surroundings aligned in red (Florensa, 1985)

Florensa adopted Giovannoni's Diradamento Theory where instead of the 'eventrement' and projecting longitudinal rectilinear axes he proposed that every opportunity should be used to create small-scale public spaces with gardens and trees in order to sanitize and ventilate the area while maintaining its picturesque setting, decrease the density of overpopulated areas, solve parking problems, and break the monotonous agglomeration of buildings.

*"En cambio se da más valor a la disminución de densidad de las zonas sobrepobladas, a lo que podríamos llamar <ahuecamiento> o <esponjamiento> de las masas edificadas. Esto se procura suprimiendo manzanas, generalmente de pocas importancia, lo que produce un aireamiento mayor que el trazado de nuevas calles, edificadas luego con casas muy altas. Por otra parte, estos espacios libres pueden contener, si no jardín, por lo menos algunos árboles y procurar espacio para aparcamiento, problema, como hemos dicho, fundamental y que no debería resolverse a lo largo de las calles de circulación, que se utilizan con ello en gran parte"* (Martorell, Florensa, Martorell, 1970: 95).

For instance, when Plan Vilaseca had to be revised –due to its impact on the old town and the number of buildings it affected–, in 1956 both Florensa and Vilaseca initiated the ‘Plan Parcial de Ordenación del Casco Antiguo de Barcelona’ (Partial Plan for the Arrangement of Barcelona’s Old Town) which was later revised and approved in 1959. As a matter of fact, this partial plan formed part of the ‘Plan Comarcal’ (Regional Plan) drafted in 1953 that focused on the regional development of Barcelona and its surrounding municipalities. While this general plan continued with the 19<sup>th</sup> century strategy of demolitions to create new streets (Busquets, 2003), its partial plan for Ciutat Vella implemented new theories and strategies. The partial plan was more inclined to create open spaces rather than a new street layout, and it had specific guidelines set by the Plan Comarcal’s ‘Oficina de Estudios de la Comisión Técnica especial de Urbanismo’ (Studies Office of the Special Urban Planning Technical Commission), directed by Vicenç Martorell Otzet. As Florensa pointed out:

*“Las nuevas teorías de urbanismo, más inclinadas a crear espacios libres que a trazar grandes vías, condujeron a este plano, presentado en 1956. En él se reduce drásticamente el número de fincas afectadas por el plano Vilaseca, con la idea de hacer más factible su realización”* (Martorell, Florensa, Martorell, 1970: 96).

The first version of the partial plan implemented a planning theory characterized by principles or guidelines very similar to Giovannoni’s; sanitation, circulation, aesthetic, and economic value.

1. Sanitation: As a contrast to Barcelona’s former plans a new system was proposed that changed from a ‘linear’ one to a ‘punctual’ selective one. A system of forming squares instead of opening streets, of creating green spaces instead of roads. The goal was limiting demolitions to small easily manageable areas rather than extending it endlessly throughout the whole reformed area.
2. Circulation: The circulatory necessities were studied and two important roads were maintained that of Avinguda de Les Drassanes formerly known as Avenida de García Morato and successor to Baixeras’s Gran Via B<sup>93</sup>; and the prolongation of Avinguda de la Catedral towards Via Laietana. However, they restrained from forming new ones keeping in accordance to the sanitation principle.
3. Aesthetic and economic value: It was necessary to respect the old town’s physiognomy and appearance by means of general improvements, repair, and conservation instead of destruction and demolition.

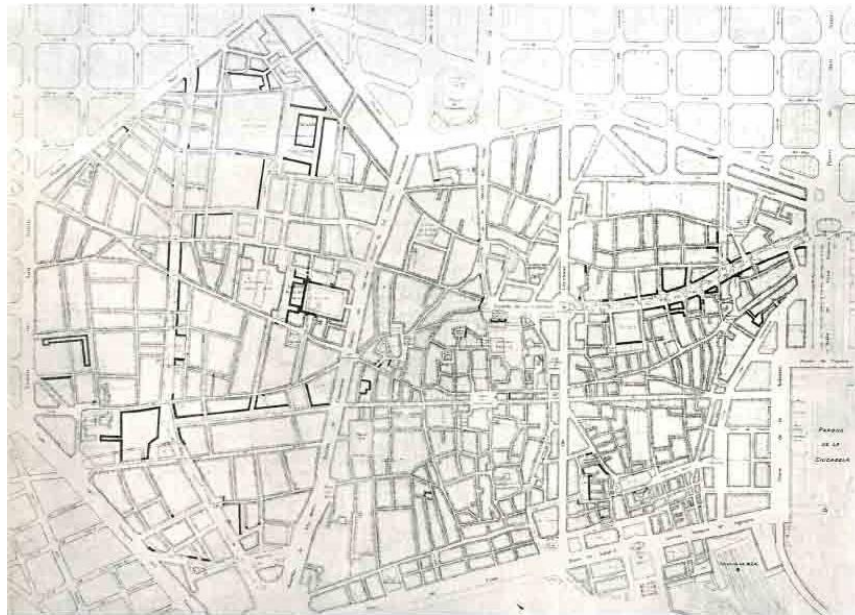
Those principals were all interrelated and affected directly by the economic value whose study reinforces the respect of buildings and the environment.

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<sup>93</sup> The big difference between this Plan’s layout of this Via (at least in its 1959 version) and Baixeras’s is that first, it is not straight. It begins at Ronda de Sant Antoni, passes in front of Carrer Muntaner and reaches Carrer de Sant Pau where it shifts direction to Portal de la Pau and Las Ramblas avoiding the destruction of Hospital de la Santa Cruz and the Drassanes shipyard which was one of the main disadvantages of Plan Baixeras. Second, it is wider of 30 meters at the level of Muntaner and 40 meters at the Portal de la Pau.

Florensa showed some financial figures and, depending on the conditions of each area, the cost required for demolitions was reduced to half:

*“En efecto, la parte más interesante, que podríamos llamar hasta sorprendente, de la Memoria que estamos comentando es el estudio comparativo, hecho con todo detalle, del plan propuesto y del actualmente vigente, desde el punto de vista económico. Resumiremos algunas cifras. Aplicando precios tipos según las zonas (precios cuya exactitud es variable, pero secundaria a los efectos comparativos), se encuentran como importe de la cantidad de metros cuadrados que precisaría demoler, 441 582 700 pesetas y 1 007 524 400 pesetas, es decir, que el costo se reduce en aquel a menos de la mitad. En cuanto al de las indemnizaciones inquilinos y gastos de urbanización, los resultados son parecidos; siempre el coste del proyecto propuesto esta alrededor de la mitad del vigente, siendo aun mayor la desproporción en las indemnizaciones a inquilinos” (Martorell, Florensa, Martorell, 1970: 97).*



**Fig. 101** 'Plan Parcial de Ordenación del Casco Antiguo de Barcelona' version 1956 that, as Florensa stated, is a new urban theory more inclined to create public spaces rather than arteries. In this plan the number of buildings affected is much less than in Vilaseca's (Martorell, Florensa, Martorell, 1970).

While working on the 'Ordenación del Barrio de la Ribera' in 1957, Florensa gave a detailed description of the Ribera neighborhood's history and its urban situation providing maps, sketches of Dionís Baixeras, architectural and sculptural fragments of buildings, and pictures of the unhealthy hygiene and sanitary conditions of the area. Just as Giovannoni argued about the importance of the buildings' heights in the matters of hygiene so did Florensa in his analysis of the neighborhood. The latter stated that due to the growth in population density and lack of space in the old town, especially in the second half of 18th century and 19th century, the city can only grow in two ways; in height and depth.



On one hand due to necessity of dwellings, squares, gardens and patios gets covered with buildings and constructions, and on the other hand, buildings already existing on narrow roads such as in the Ribera neighborhood are raised to two or three stories resulting in dark and humid streets leading to the exactly opposite results to that sought by the 'esponjamiento'.



**Fig. 102** Florensa's proposal of organizing the Ribera neighborhood through 'esponjamiento' by providing air, sunlight and a series of squares and gardens (Florensa, 1957)

Giovannoni stressed on the importance of buildings' heights for the sake of hygiene, especially the buildings around squares and streets because they become a barrier and insulate and overshadow the rest of the urban fabric. He argued that increasing the height and volume of buildings would be harmful and needed to be limited. He admitted that it was not a simple procedure, but regardless, the City Council should impose certain norms and regulations concerning this matter in order to reach the following objectives of; restoring buildings, opening spaces, and decreasing density rather than increasing the height and volume of buildings. In return, this will derive economic benefits thanks to the added value gained by buildings due to the local context development. He even gave an

example that buildings located on streets less than 6 meters wide should be limited to 12 meters in height.

*“Comment pourrait-on, dans la pratique, atteindre ou approcher ces objectifs, en instituant cet ordre nouveau et en imposant quasiment, pour des raisons d’intérêt général, une servitude d’altius non tollendi [«hauteur limitée»] sur tout un quartier?*

*La réponse n’est ni simple, ni unique, ni catégorique. Elle peut l’être que pour les constructions élevées sur les nouvelles placettes, où cette servitude peut facilement être imposée par la municipalité, qui en retirera des avantages économiques grâce à la plus-value acquise par les immeubles du fait de la mise en valeur du contexte local.*

*Dans le reste du secteur, on pourra efficacement s’appuyer sur un règlement d’urbanisme particulier, que l’on pourrait résumer en quelques dispositions spéciales. L’une consisterait à limiter à 12 mètres au maximum la hauteur des édifices situés sur des voies d’une largeur inférieure à 6 mètres; une autre limiterait la hauteur des bâtiments d’angle situés entre une grande et une petite voie, de façon à empêcher qu’ils ne forment (comme c’est le cas lorsqu’on applique la législation actuellement en vigueur) une orgueilleuse barrière, néfaste à l’esthétique comme à l’hygiène car elle isole et maintient dans l’ombre le tissu mineur du secteur” (Giovannoni, 1998 : 289, 290).*

After analyzing the Ribera neighborhood Florensa concluded that ‘eventrement’ was unnecessary because it was well connected with no circulation problems and suggested the ‘esponjamiento’ by scattering the dense fabric in the neighborhood with many open spaces, small in size so as not to affect the streets’ and houses’ scales.

*“El único medio de luchar contra ello es practicar lo que llaman los alemanes “gelockerung” que podríamos traducir por “ahuecamiento” o “esponjamiento” y que consiste en salpicar el denso macizo de la barriada con numerosos espacios vacíos, en general de no grandes dimensiones, para que no destruyan la escala de calles y casas; estos espacios reducen la densidad de población de la zona, introducen luz en sus calles y con algo de jardín y sobre todo arboles, dan al barrio un nota alegre, sin destruir sus valores pintorescos” (Florensa, 1957: 18).*

He added that there was a time when it was believed that opening up large arteries was the only solution for interior reform but nowadays this idea should be abandoned especially when dealing with old towns such as Florence where ‘eventrement’ is way less justified. There is no doubt that these kinds of operations made it possible for cities to re-qualify their most emblematic spaces, and most importantly, they were the reason behind the subsequent and further development of the great ‘metrópoli’. But even then the ‘Cité’ could have been saved with small retouches as in the case of Paris.



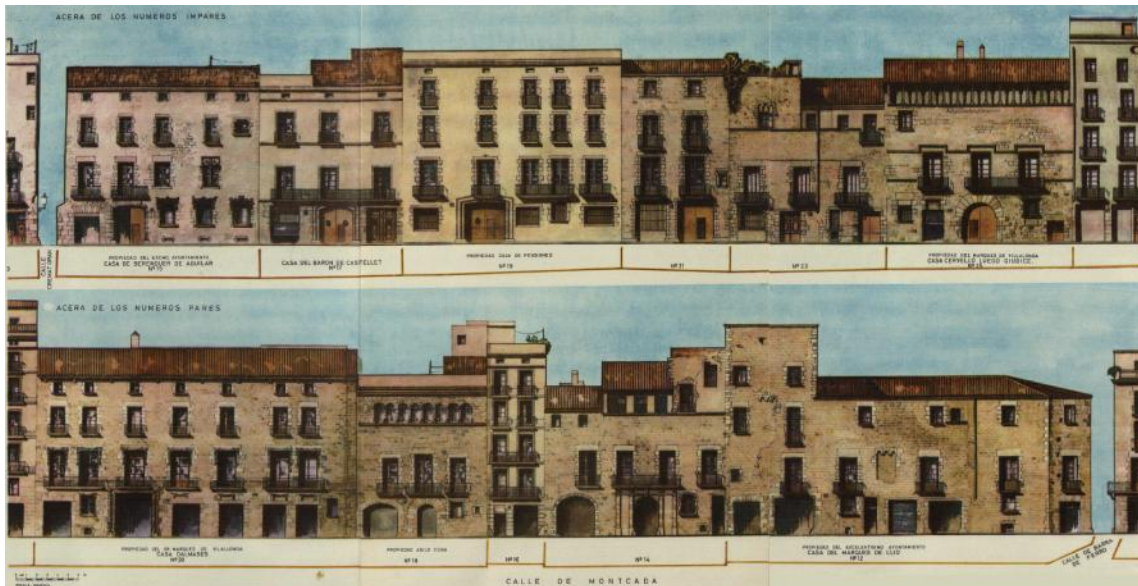
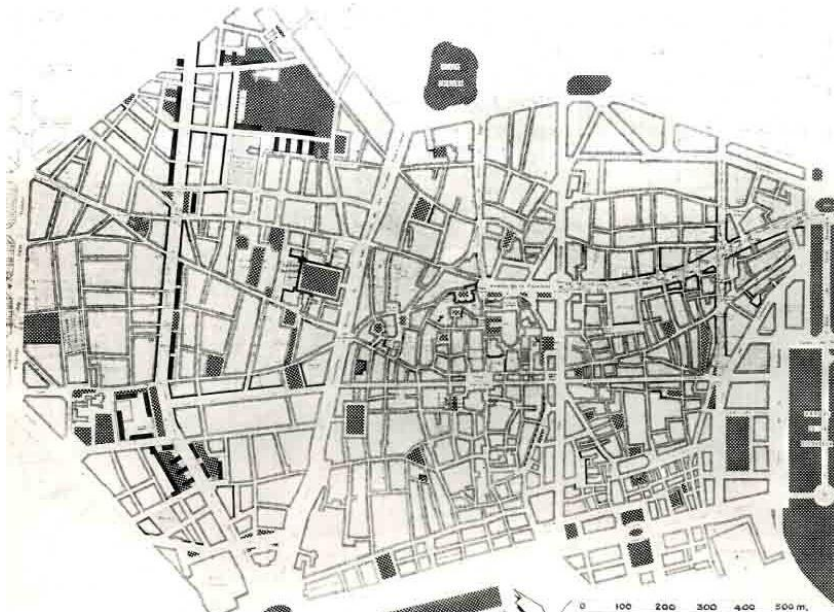


Fig. 103 Vertical plan of Carrer Montcada (Florensa, 1957b)

In his plan he suggested various improvements such as that of Carrer Montcada Carrer Flassaders, and Carrer Allada i Vermell; and various strategically distributed open spaces like for example the green space on Carrer dels Sombrerers that replaced four small houses; or the ones between Carrer de Cremat Gran and Carrer Flassaders that replaced several blocks of buildings (one of them nowadays is Plaça de Sant Jaume Sabartés); and the one between Carrer de la Neu de San Cugat and Carrer dels Cescs de San Cugat that replaced one block of buildings; and highlighting and landscaping the existing ones like Fossar de les Moreres in front of Santa Maria del Mar church which used to be a cemetery, and Plaça de Sant Cugat where the church of the same name once stood before it was burned in the Civil War.

Florensa's and Vilaseca's 'Plan Parcial de Ordenación del Casco Antiguo de Barcelona' was indefinitely approved in 1959, but it was studied several times by various municipal agencies, experts and politicians which led, yet again, to substantial and ambitious modifications difficult to execute. There were many variations from the first version that resulted in an increase in the volume of work, in the number and size of the affected buildings, and eventually an increment in the whole cost of the project as opposed to the economic principles of the first version.

*"Dicho plan, que a su vez, fue objeto de nueva redefinición en 1959, mantenía las tres vías propuestas por Cerdá y planteaba numerosas operaciones de saneamiento, abriendo placitas y pequeños espacios verdes; pero tuvo escasas realizaciones debido a las dificultades de gestión y financiación a causa de la Ley de Bases del régimen local de 1945 que preveía en la base 16 que los ayuntamientos indemnizaran a los inquilinos y a los dueños de establecimientos mercantiles o industriales que ocupasen inmuebles expropiados" (Tatjer, 1998: 18).*



**Fig. 104** 'Plan Parcial de Ordenación del Casco Antiguo de Barcelona' second version in 1959, substantially modified and converted into an ambitious project with more difficulty to be executed as Florensa stated (Martorell, Florensa, Martorell, 1970)

For this reason, a small part of this plan was realized corresponding to different projects, like; Avenida García Morato (part of Baixera's Via B); the Museo Marítimo; Carrer de Méndez Nuñez; Hospital of Santa Cruz's surroundings; and restoration of buildings especially in La Ribera neighborhood.

But it was mostly Florensa's punctual public spaces and building restorations that were carried out (especially that the GATCPAC's plan was put on hold after the Civil War).

As a matter of fact, as Tatjer stated, among all the plans and proposals for the old town, only Florensa's punctual interventions in the Gothic Quarter and the rest of the old town were carried out especially in areas affected by the Civil War like in Avinguda de la Catedral and the Plaça Nova (part of Via C), Plaça Sant Felip Neri, Plaça de la Vila de Madrid and many in the Raval like Plaça de J. M. Folch i Torres, among others:

*"De hecho, solamente se llevaron a cabo algunas operaciones puntuales dirigidas por A. Florensa. Unas en torno a edificios o espacios monumentales, en especial en el Barrio Gótico sobre áreas afectadas por los bombardeos de la guerra civil, como los alrededores de la Catedral, donde se inició un primer tramo de la abertura transversal prevista por Cerdá el cual dio lugar a la avenida de la Catedral, o como la recreación de la plaza de san Felipe Neri. Otras en el Raval, en torno al antiguo hospital de la Santa Cruz, además de iniciarse las expropiaciones para abrir el segundo gran eje perpendicular -la llamada avenida García Morato- que supuso, también la remodelación de las antiguas atarazanas convertidas definitivamente en el Museo Marítimo. Paralelamente se iniciaron, también, las expropiaciones para abrir la calle Méndez Nuñez, prolongación de la trama Cerdá por la parte cercana a los jardines de la Ciudadela" (Tatjer, 1998: 19).*

### The series of Florensa's small-scale squares

Adolf Florensa's series of 'esponjamiento' interventions and beautification of the city were carried out throughout the city's different circumstances that fell within the plans of Interior Reform –triggered first by the 1929 Universal Exhibition– from the opening of the Via Laietana, and the policy of the Gothic Quarter to the Civil War and Porcioles's mandate.

And even after the Civil War, while the urban scene in the Eixample and the surrounding municipalities were undergoing massive growth and consolidation, the old town's strategies and policies of creating small-scale public spaces, constant restoration of monuments, and intitation of tourism were maintained especially in the occasion of the XXXV Eucharistic Congress in 1952, the 'Primer Congreso Nacional de Urbanismo' (1st National Congress of Urbanism) and Cerdà Centennial in 1959.

The 'Servicio para la Conservación y Restauración de Monumentos' was involved in the creation of a series of urban gardens or square-gardens where Florensa and Vilaseca worked with the director of the 'Instituto Municipal de Historia', Duran i Sanpere (Florensa, 1945) and in some of the interventions collaborated with the director of the 'Dirección de Parques y Jardines' (Department Parks and Gardens), Nicolau Maria Rubió i Tudurí (1917-1937) and his successor Luis Riudor i Carol (1940-1968), and continued later on with Joaquim Casamor (1968- 1986).

These operations in the historic center exposed a series of archaeological findings around which they created small gardens, a combination that Florensa praised for their aesthetic qualities:

*"es nuestra firme opinión que el tipo más refinado de jardín urbano, el de cualidades estéticas más elevadas, es el que acompaña y rodea a los monumentos que nos han legado los tiempos que fueron. Las viejas piedras y la vegetación suele decirse que se complementan; pero este es decir poco, pues en realidad cada uno de estos elementos experimenta por la vecindad del otro una multiplicación asombrosa de su propia calidad"* (Florensa, 1954: 2).

The procedure of restoration itself and the way the open space relate to the monuments reflects Giovannoni's influence in Florensa more than Viollet-le-Duc in terms of heritage. According to Florensa, they accompany and complement old buildings better than the new ones with their smooth surfaces and aggressive angles –an issue that also concerned Giovannoni– thus, urban gardens provided more aesthetic harmony:

*"Los edificios antiguos, que llevan encima una carga de siglos, aunque no estén en ruinas, tienen, como consecuencia de su edad, unas cualidades que los aproximan a los objetos que la naturaleza produce espontáneamente. Los años han suavizado sus aristas y medio borrado sus detalles, los materiales han «madurado» de aspecto y en su conjunto*

*armonizan más con un jardín que un edificio nuevo, de superficies y ángulos lisos y agresivos” (Florensa, 1954: 1).*

He added that urban gardens offer and add many other positive features and qualities from the parks to the neighborhood gardens and the small green corners where the elderly rest and children play.

The creation of gardens along with the heritage and archaeological revelations played an essential part in the development of public space projects in the historic fabric. These interventions made possible the creation and opening of small spaces in the congested old town that changed and improved its quality of life and image for its dwellers as well as its visitors.

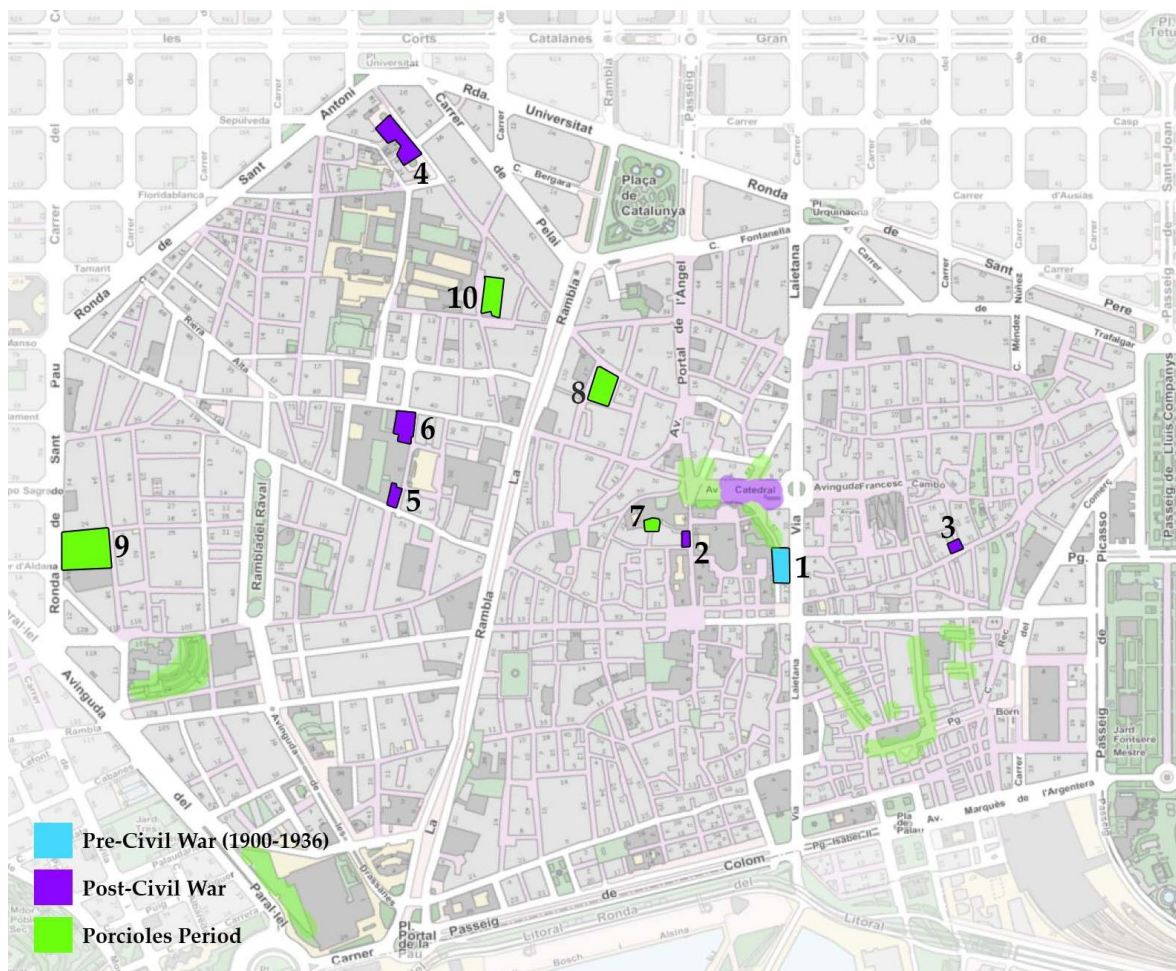
Not to fail to mention that unlike all Ciutat Vella’s former plans of reform, Florensa’s plans favored the creation of small-scale public spaces to new street layouts which meant less expropriation and damages. To him it was important to create a new form of partial expropriation for the sake of preserving artistic and historic qualities without depriving the owners their general rights and to whom appropriate but limited compensation should be provided just like the one established by Brussels’s City Council when working on the ‘Grande Place’<sup>94</sup> (Florensa, 1947).

Current space	Original space and date of construction	Date of destruction or change	Date of current space	Future changes
<b>1. Plaça Berenguer el Gran</b>	Area with narrow streets and square	1927 / 1933 work began	1936	1950 sculpture / 2015 total remodeling
<b>2. Plaça Garriga i Bachs</b>	Residencial building	1928	1941	
<b>3. Plaça Sant Cugat</b>	Church Sant Cugat del Rec 10 <sup>th</sup> century	1908 burned / 1938 burned Civil War	1941	1990 remodeled and augmented
<b>4. Plaça Castella</b>	Paüls Convent 18 <sup>th</sup> century 1704	1808 military hospital	1946	1968 subterranean parking/ 1980 remodeled
<b>5. Plaça del Canonge Colom</b>	Part of Hospital de la Santa Creu	1926 purchased City Council	1947	1983 remodeled
<b>6. Jardins del Dr. Fleming</b>	Part of Hospital de la Santa Creu and Royal Academy of Medicine		1947	1956 sculpture / In remodeling for the past years

<sup>94</sup> In Brussels not only the City Council adequately compensates owners, but when working on the buildings surrounding the City Hall in the Grande Place, Charles Buls imposed on the owners to conserve their property’s façade made possible by annual advanced payments provided by the municipal administration itself. They even took direct charge of reparation and maintenance work and provide real estate insurances for the buildings (Giovannoni, 1988).



<b>7. Plaça de Sant Felip Neri</b>	Cemetery of Montjuïc del Bisbe	1790 / 1938 bombed due to Civil War	1958/1962	1962 fountain and sculpture / 1963 new sculpture / 2009 fountain restored
<b>8. Plaça Vila de Madrid</b>	Part Carmelitas Descalzas Convent 1588 and part dwellings	1936 burned due to Civil War / 1954 excavation findings	1958	2002 remodeled
<b>9. Plaça J.M Folch i Torres</b>	Paüls Convent 19 <sup>th</sup> century 1833	1835 burned / 1839 prison / 1936 destroyed	1957	1985 remodeled fountain / 2016 in ren
<b>10. Plaça Vicenç Martorell</b>	Bonsuccés Convent 17 <sup>th</sup> century	1835 military property / 1936 demolished	1957	1961 sculpture / 1980s renovated

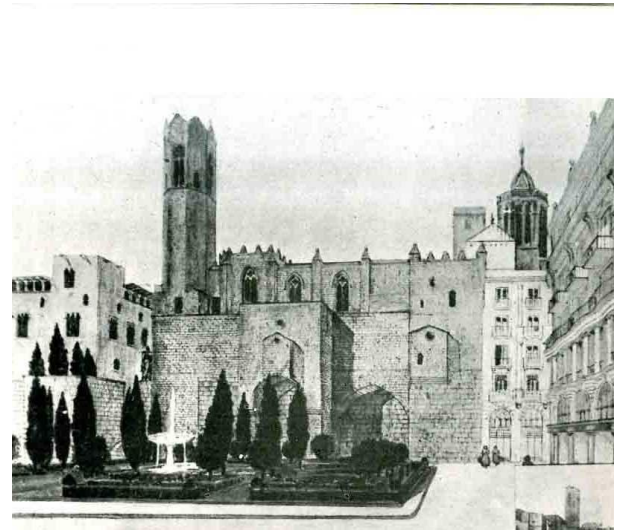


List of Florensa's small-scale squares created in Ciutat Vella after the opening of Via Laietana, after the Civil War and during Porcioles's mandate. (Author's elaboration from different sources. Fabre, Huertas, 1988; Florensa, 1957, 1958a, 1958b, 1958c, 1959a, 1959b, 1964; bcn.cat/Art públic)

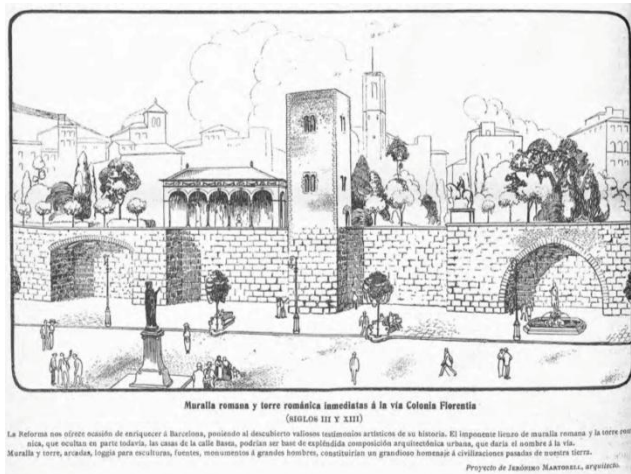


## Plaça Berenguer el Gran

With the Old Town's first 'eventrement' and rupture in its fabric embodied in the opening of the Via Laietana caused a collective guilt and a change in context and scale from the 'Gross Barcelona' to urban policies on the scale of artistic restorations, renovations with less possible damages, and archeological excavations based on recovering identity and heritage, like the Gothic Quarter policy, and tourism attraction. And in parallel to heritage conservation, Florensa was working on selective recovering and partial destructions substituting the 'eventrement' with the 'esponjamiento' of the Old town even beyond the limits of the Cathedral neighborhood.



**Fig. 105** Puig i Cadafalch's proposal of recovering the Roman Walls while creating Plaça Berenguer el Gran and the staircase leading to Plaça del Rei (Martorell, 05-11-1911) (Martorell, Florensa, Martorell, 1970).



**Fig. 106** Martorell's proposal of recovering the Roman Walls on the Via Laietana (Martorell, 05-11-1911)



**Fig. 107** Domènech i Montaner's proposal of recovering the Roman Walls in Carrer del Sots-tinent Navarro and Plaça d'Emili Vilanova (Nicolau, Fuster, Venteo, 2001)



Fig. 108 F. P. Nebot's proposal of Plaza en la Acrópolis de Barcelona (Nebot, 1911. AHCB)

Opening Plaça de Berenguer el Gran was directly connected to the opening of the Via Laietana and continued to be part of the Gothic Quarter and renovating the old town policies. It was first proposed by Jeroni Martorell's projects in 1911 published in *La Catalunya* –after discussing the Gothic Quarter idea along with Rucabado–, and by Puig i Cadafalch in 1914. Both their purpose was to provide better visibility to the Royal Palace, the Roman Walls and Santa Àgata Chapel located inside the walls.

Opening the Via Laietana left the street isolated and disarticulated from its surrounding urban fabric (Martorell, 1929) the fact that led the City Council in 1914 to commission Lluís Domènech i Montaner, Josep Puig i Cadafalch, and Ferran Romeu, as mentioned earlier, to restudy the Via's whole structure. And thus, it was divided among them into three parts. The second part of the Via from Plaça del Àngel to Sant Pere Més Baix, that covered also the area of Berenguer square was assigned to Puig i Cadafalch.

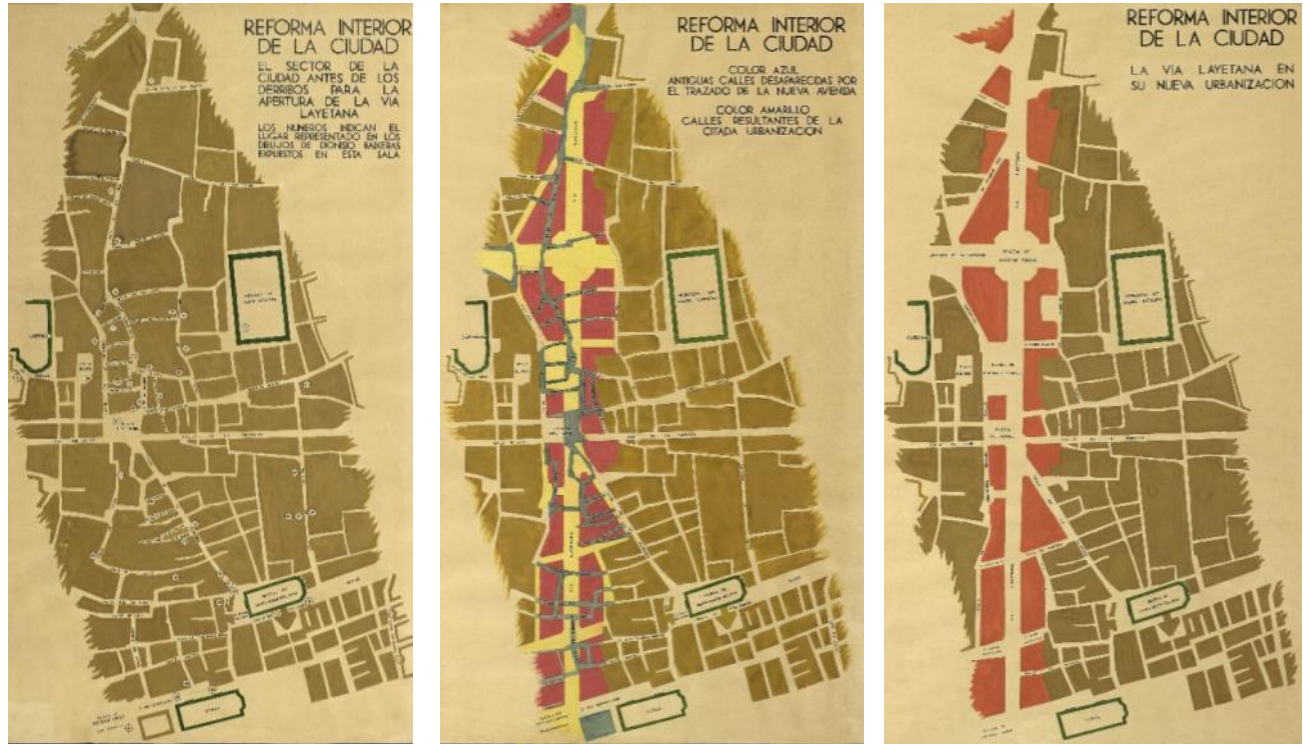
In order to expose Santa Àgata Chapel, he proposed the demolition of the existing buildings that covered the chapel and the old walls widening by that the area to make way for the square. He also anticipated the creation of Carrer de Tapineria. To give more visibility and value to the Roman Walls, he built a staircase forming a direct connection between the square itself and Plaça del Rei.

Recovering and conserving what is left of the Roman Walls was an essential matter of rediscovering and preserving the city's history and identity. And so were important the excavations taking place in Plaça del Rei including the different recoverings on the Via's first section in Carrer del Sots-tinent Navarro and Plaça d'Emili Vilanova assigned to and designed by Domènech i Montaner.

*"[...] en 1913, al quedar abierta la Vía Layetana, se había creado como una conciencia general de culpabilidad por la destrucción implacable que se había llevado a cabo; y al estudiar las modificaciones necesarias para enlazar la nueva calle con las antiguas, una de*



*las cosas que se procuro fue dejar visibles y aptas para una futura restauración las partes de muro que habían aparecido al derribar las casas. Estos tramos de muro eran los que hoy podemos admirar en la plaza de Berenguer el Grande, en la calle del Subteniente Navarro y plaza de Emilio Vilanova que entonces se rotularon, quizá con más acierto, de las Murallas Romanas” (Florensa, 1964: 12).*



**Fig. 109** Drawings showing the area in three stages: before opening the Via Laietana; the affected streets from the demolitions; and the new layout after opening the Via (Casassayas Mariol, 1909)

Puig i Cadafalch's proposal was never carried out or approved and was left until 1927 when the preparations for the 1929 Universal Exposition were at its peak. In that year the 'Servicio para la Conservación y Restauración de Monumentos' was created and the works on the Gothic Quarter policy in the Cathedral neighborhood were initiated. The 'Servicio' took charge of the project and started the demolition of the existing houses backed onto and covering the Roman walls. However, the rest of the buildings backed onto the walls leading up to Casa de la Pia Almoína remained standing until the 50s.



**Fig. 110** The area in 1917 before the construction of the square and before demolishing the buildings and streets covering the Roman Walls and Santa Àgata (Nicolau, Venteo, 2001)



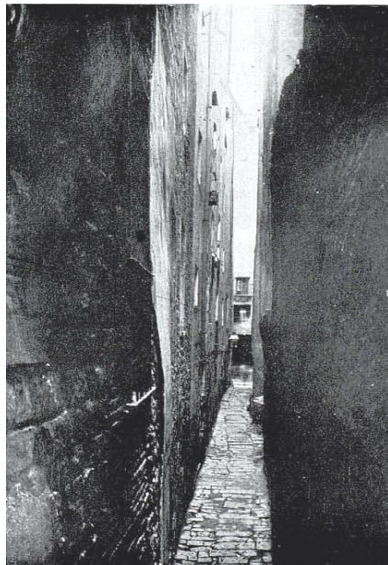
**Fig. 111** The walls visible in 1934 after demolishing the backed up buildings (Florensa, 1964)



The area, before the Via Laietana, was occupied by one of the most picturesque and secluded part of the old town. It was subdivided by Carrer del Bon Deu, Carrer de les Tres Voltes, Carrer de les Donzelles the narrowest street in the town, and Plaça de l'Oli. As a matter of fact, there was another proposal, an alternative to Puig i Cadafalch's, of constructing a block of houses in the same area. But the demolition of the buildings and streets left the Santa Àgata Chapel exposed and the IV century Roman Wall visible. For this reason the project was modified and it was decided to create a square to give value and reference to the newly exposed monuments. *"Se suprimió una manzana y la plaza nació. Quedo con esa forma tan graciosa que tienen las plazas puestas a un lado de una calle"* (Florensa, 1950: 24).



**Fig. 112** Drawings by Dionís Baixeras in 1909 with the 1<sup>st</sup> showing the busy street view from Santa Àgata before the demolitions, and the 2<sup>nd</sup> showing Carrer de les Tres Voltes (Florensa, 1950)



**Fig. 113** Carrer de les Donzelles the narrowest street in Barcelona (Florensa, 1950)



**Fig. 114** Plaça de l'Oli (Cuyas, 1908. AFB)





The square is presided by the monument of Ramon Berenguer III, designed by Josep Llimona, located on the upper level of the square in a way separating visually the road traffic from the garden. The lower level is occupied by benches facing the walls, as well as a garden with a central parterre where children can play, and architectural elements scattered at the foot of the wall. Beside the wall runs a road paved with natural stone and bordering the sand filled parterre is a path paved with gravel.

According to Florensa, the only inconvenience that this square-garden has is being an obstacle when crossing Carrer Tapineria on foot towards the Cathedral or the City Hall especially that it is totally enclosed from the street side and accessed through two gates with a small staircase on either side. In spite of this, Florensa stated that this square-garden will become a reference for future squares and interventions.

*“ya en nuestros tiempos, en 1935, se le dio una disposición que podemos sin reparo calificar de modélica, ya que, debida al entonces Arquitecto Jefe de Parques y Jardines, Nicolás Rubió, ha servido de orientación a casos análogos”* (Florensa, 1959b: 9).

However, this inconvenience that Florensa mentioned, will cause around 80 years later, further problems of circulation and connectivity due to the immense traffic and massive tourism that eventually, in 2015, the shape of the square had to be changed and adjusted to serve the new needs and requirements in the city, a matter that will be discussed further.

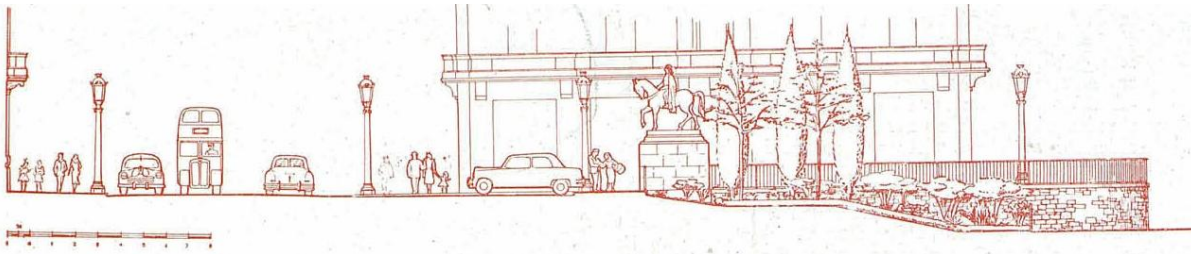


**Fig. 116** Plaça Berenguer el Gran in 1934 during its construction with a view of the exposed Roman Walls and Santa Àgata chapel with Casa Padellàs being constructed behind (Florensa, 1964)

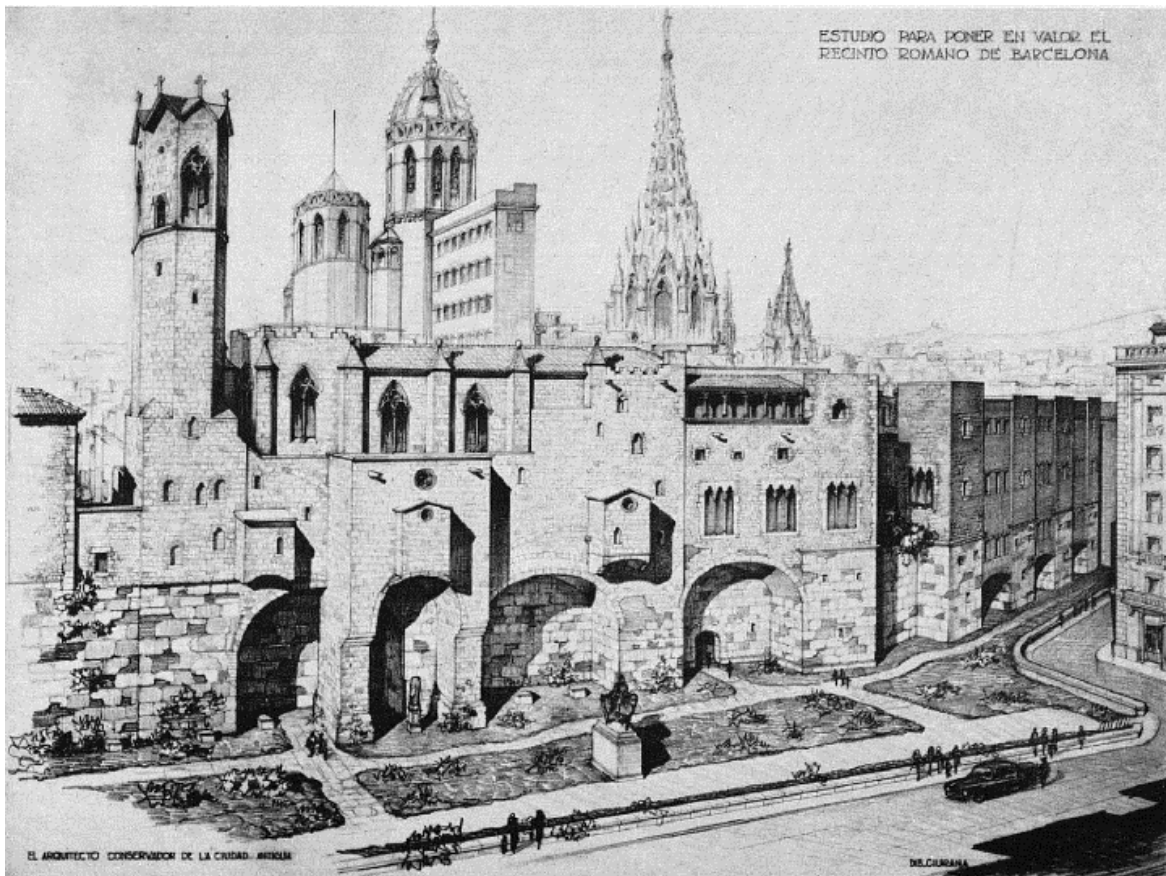


**Fig. 117** The square in 1935 with the first layouts of the space and garden and the gradual floor descending onto the foot of the wall (Pérez de Rozas, 1935. AFB)





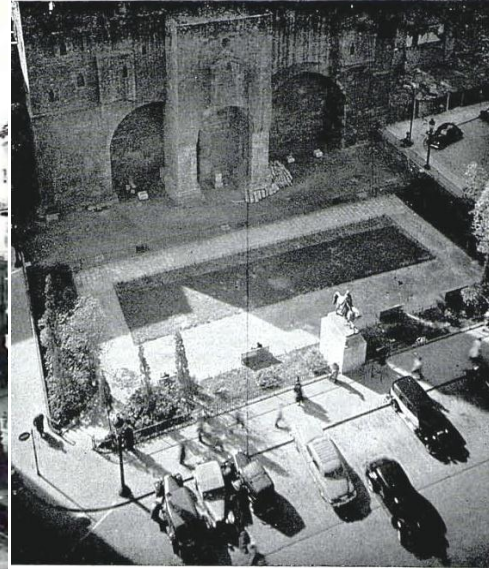
**Fig. 118** Section of the whole square showing the gradual decent from Via Laietana until the foot of the Roman Wall. (Florensa, 1950: 27)



**Fig. 119** Perspective to study and evaluate the whole set of the square with the Roman walls (Florensa, 1964)



**Fig. 120** View of the square in 1941 with Casa Padellàs behind already reconstructed. On the right, the buildings on the façade along Carrer Tapineria and Casa de Pia Almoïna were not yet destroyed and the sculpture of Berenguer el Gran not yet placed (Nicolau, Venteo, 2001)



**Fig. 121** Aerial view of the whole composition of the square in 1950 with Llimona's sculpture of Berenguer el Gran already placed (Florensa, 1950)



**Fig. 122** The square in around 1960 with the whole façade finished including the façade that runs until Casa de Pia Almoïna with the planted garden and sculpture of Berenguer el Gran (Florensa, 1964: 2) (Casas, 1957-1965. ANC)



The construction of the square started in 1933 and completed by 1936, but it wasn't until 1950 that the Llimona's sculpture, 'A Ramon Berenguer III'<sup>95</sup>, was placed.

During the construction of the square and restoring the façade of the Roman Wall and Santa Àgata Chapel, Florensa and Duran i Sanpere were also busy working, on the other side of the square, on archeological excavations and expropriation of a non-artistic house in the old Plaça del Rei. They also relocated into the square Casa Padellàs that was dismounted from Carrer Mercaders due to the opening of Via Laietana. It was one of the first historic and artistic buildings to be moved and relocated in a new place, becoming a common and famous procedure in the old town. The house was relocated into the square in order to conserve the square's old proportions after being left opened and exposed (Martorell, 06-03-1930) due to the demolition of the former building where Casa Padellàs now stands.

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<sup>95</sup> *"In 1880, Barcelona City Hall awarded the young Josep Llimona a grant that had been established to allow art students to complete artistic studies abroad. Llimona, a student at the Llotja School of Fine Arts, went to Rome, where thanks to extensions of his grant he was able to remain until 1885. During his stay in the Italian capital, he sent some of his work back to Barcelona. Among these pieces there was a design for a large equestrian statue of the Count of Barcelona, Ramon Berenguer, "The Great" (Rodés, 1082-Barcelona, 1131). On the strength of this drawing, Llimona was commissioned to cast a life-size sculpture in plaster which was awarded a Gold Medal at the 1888 Universal Exhibition. This plaster statue was first located in the Palau de la Indústria (Hall of Industry), and was later moved to the gallery of the Palau de Belles Arts (Hall of Fine Arts), both pavilions belonging to the Exhibition.[...] The decision to locate the bronze cast of this statue in the square, which was still under construction, was ratified on 9 December 1919, and three years later it was officially decided to name the square "Ramon Berenguer el Gran" instead of "Onze de Novembre", which had been the original intention, adopted in 1918 to commemorate the signing of the Armistice at the end of the First World War. However, it took a long time before the square to be completed [...] Restoration work on the wall itself, begun in 1927 by City Hall under the first dictatorship (1923-1930), was not concluded until the 1950s, under the second dictatorship (1939-1975), during which time reconstruction work had in part been facilitated by Condor Legion bombardments in the Civil War. Development of the Plaça de Ramon Berenguer el Gran was in the hands of the municipal architect Lluís Riudor, the head of the Barcelona Parks and Gardens Dept, and on March 11th, 1950, Limona's statue was finally unveiled, [however] The horse's tail on the plaster statue had been damaged while in storage, and when the Victòria Foundry came to cast the figure in bronze, Limona himself having died in 1934, Federic Marès[...] was given the task of fashioning a replacement..." (Fabre, Huertas, 2004. Artpúblic).*





**Fig. 123** Inauguration of the sculpture of Ramón Berenguer el gran in 1950 (Archivo Habitat Urbà)

Another sculpture by Llimona was placed in **Plaça de Garriga i Bachs** that, like Plaça Berenguer el Gran, was created within the same policy of the 'Gothic Quarter' directly affected with the remodeling of Carrer del Bisbe, the restoration of 'Cases dels Canonges' and Palacio Episcopal, and the construction of the Rubió i Bellver's neo-gothic bridge between 1927 and 1928 for the occasion of the 1929 Universal Exposition. In its location on Bisbe Street between the Cathedral and Sant Sever Chapel resided the only 19<sup>th</sup> century residential building with no historical value. Just like the case of Plaça Berenguer el Gran, Puig i Cadafalch in 1914 and Jeroni Martorell in 1927 suggested the demolition of this building to provide a better visibility for the Sant Sever Chapel, the Cathedral and the Episcopal Palace.

Based on this idea, the City Council's Alderman Andreu Garriga i Bach bought the house and handed it over to the municipality for demolition. And so in 1928, after the inauguration of Rubió i Bellver's bridge, the square Garriga i Bachs was created. It was designed by the architect Pere Benavent de Barberà where he converted the dividing wall between the square and Sant Sever into a façade of classical style and placed a monument by Llimona (Fabre, Huertas, 2004. Artpúblic) dedicated to the martyrs of independence. The monument was designed in 1929, during Primo de Rivera's dictatorship, and

financed by Josep Maria Milà i Camps the Diputació president. It took its definitive shape in 1941, during Franco's dictatorship, and was placed in the square officially inaugurated in that same year (Ganau, 2003). Other public arts were placed in the square giving a Catalan Art Nouveau taste to it like Vicenç Navarro's alabaster relief 'Àngel' (Borràs, 2004. Artpúblic) and a built-in remembrance tiling based on engravings by Bonaventura Planella dating back to 1815.

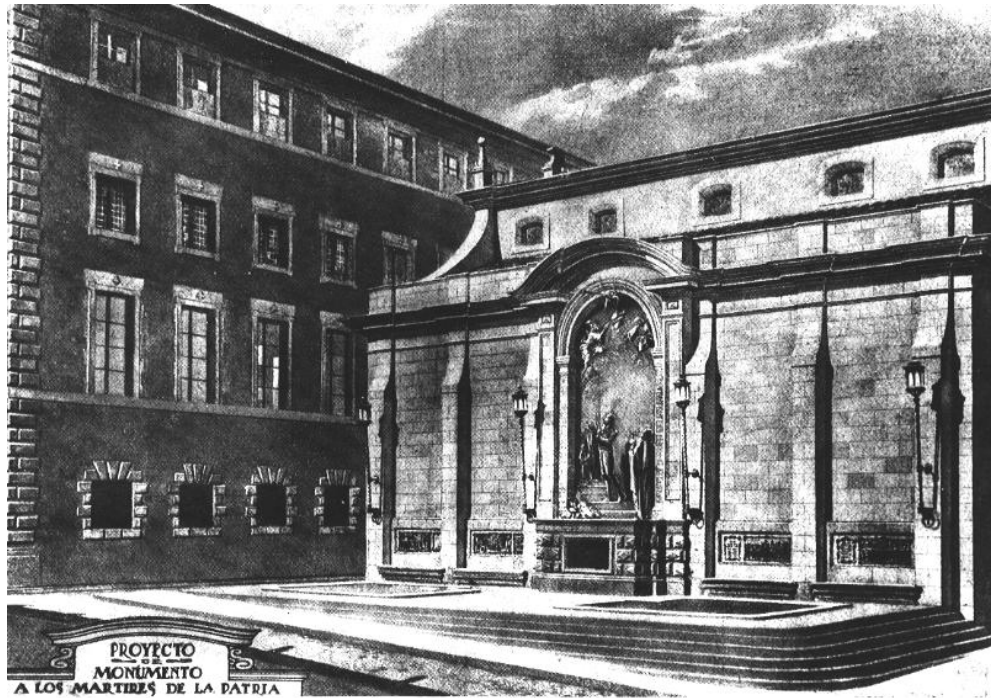


Fig. 124 Sketch of the 'Monumento a los Mártires de la Pátria' (Archivo Habitat Urbà)

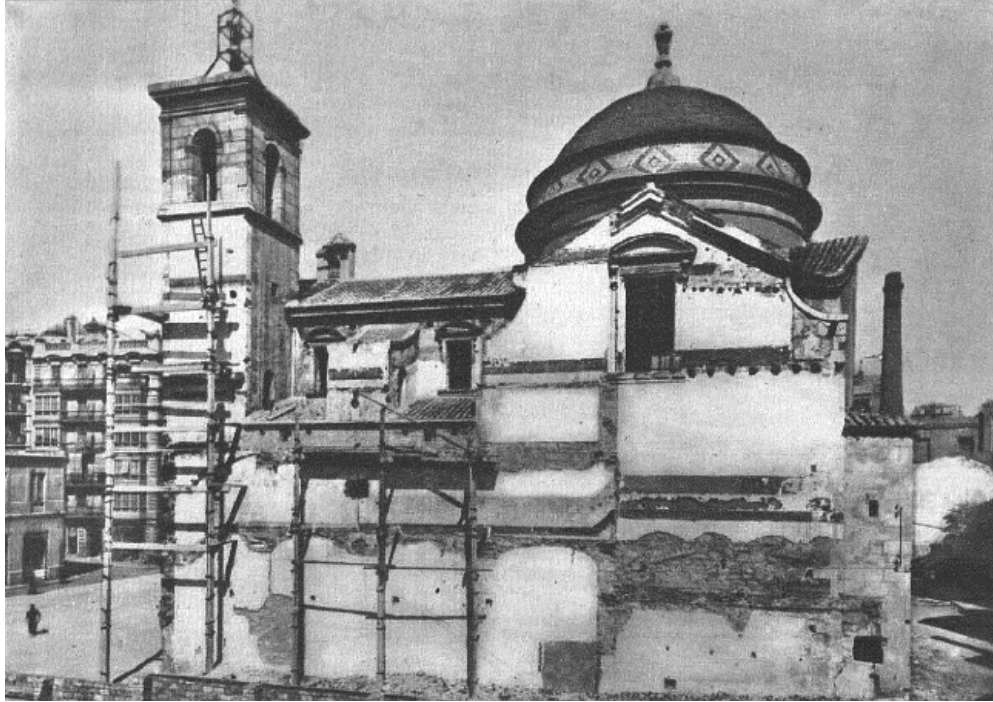
During those early years of the 1930s, new ideas were being formulated on a national and international level and in parallel to conservation of monumental heritage. Like the Athens Charter in 1931, the GATEPAC, Giovannoni's Diradamento theory which advocated new urban values and strongly substituted the concept of the 19<sup>th</sup> century 'eventrement' with the concept of 'esponjamiento' as a basic principle of hygiene that is clearly reflected in Florensa's interventions in the old town.



**Fig. 125** Barcelona bombarded in 1938 by the Italian Aviazione Legionaria (Italian Airforce, 1996)

However, the outbreak of the Civil War, between 1936 and 1939, halted all plans and programs and prevented the implementation of the GATCPAC's proposals for Ciutat Vella, Eixample, and the rest of the area until after the war where Florensa resumed the same line of work. In addition to constantly restoring monuments, he continued recovering or creating new small-scale public spaces particularly the ones destroyed by the bombings. In 1938 several areas in the old town were bombed and totally or partially destroyed including the area of the Cathedral and Plaça Nova, Plaça Sant Felip Neri, and Plaça de la Vila de Madrid. However, their recovering did not begin until the post-war period of the 40s or even mid 50s.

In the meantime, during the arrival of Franco, he proceeded with his work outside the Gothic Quarter like his work on Hospital de la Santa Creu, Sant Pau del Camp church and Drassanes.



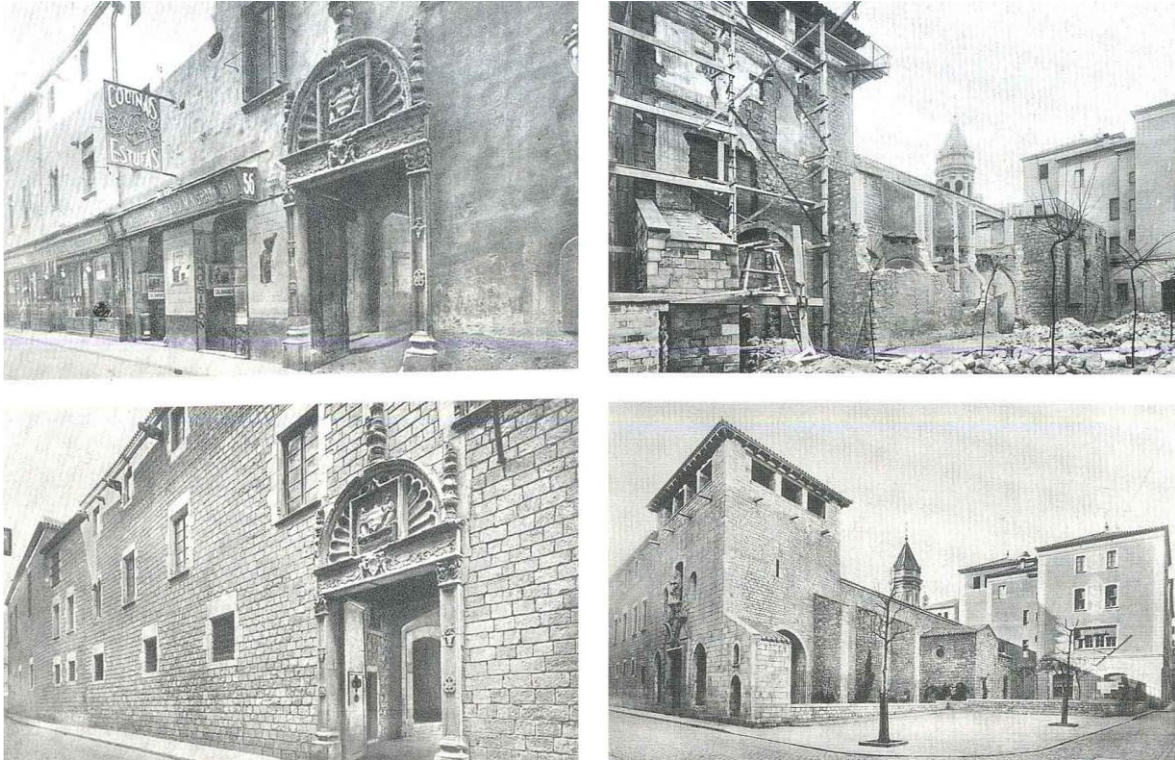
**Fig. 126** Recovering the old church of Hospital Militar during the opening of Plaça de Castella (Florensa, 1962)

The work began on **Plaça de Castella** in the 40s which was part of the series of small-scale squares that came to exist as a result of cemetery exhumation or monastic confiscations of the 18<sup>th</sup> and 19<sup>th</sup> century as discussed earlier. In the space on Carrer dels Tallers, once existed the first Paül convent in 1704 under the name Casa de Sant Sever. In 1808 was confiscated by the French and converted into a military hospital then into a tobacco factory. It returned into a military hospital during the Triennio Liberal and remained until the 1940s when the hospital moved to its new location in Vall d'Hebron (Fabre, Huerta, 1988). In 1946 the old hospital was dismantled in its place Plaça Castella was created. The church of Sant Sever remained standing and was restored and reopened to the public in 1947 in which year Florensa moved to creating various projects of 'esponjamiento' in while restoring the old Hospital de la Santa Creu on both of its sides on Carrer de l'Hospital and Carrer del Carme.

The hospital itself was closed down and purchased by the City Council in 1926 and one part was given to the Diputació that allocated the 'l'Institut d'Estudis Catalans' (1931) and the 'Biblioteca de Catalunya' (1939), and the other part became the 'Escola Massana d'Arts i Oficis' (1935). In 1947, along Carrer de l'Hospital, began the restoration of Hospital de la Santa Creu's large façade that, after centuries of neglect, had been filled with many stores that covered its stone and arches. The shops were removed, the whole façade was redone and its stone exposed. At the intersection of Carrer de l'Hospital and Carrer de Cervelló (nowadays Floristes de la Rambla) the buildings of d'En Colom hospital were demolished for a better view to the previously restored wall. The space where once stood



the buildings gave way to a new open space, the **Plaça Canonge Colom** itself, another operation with a hygienic function (Florensa, 1953; 1957). In Peiró's words: *"Dins del grup compost per aquells bastiments s'obrí un nou espai, la placeta del Canonge Colom, en una altra operació de diradament, és a dir, d'esponjament urbà"* (Peiró, 2002: 65).



**Fig. 127** The façades of Hospital de la Santa Creu before and after restoration, and demolitions of Carrer de l'Hospital and Carrer de Cervelló's corner to create Plaça Canonge Colom (Florensa, 1953)

On the posterior façade of the Hospital and the 'Real Academia de Medicina y Cirugía' on Carrer del Carme and Carrer de Cervelló, another square was created. Taking advantage of the restoration of the hospital and its surroundings two small houses were expropriated and in their place **Jardins del Doctor Fleming** was created (Florensa, 1953). In his words Florensa commented while working on both squares: *"Sin embargo, cuando esta operación urbanística pueda completarse tendrá un resultado indirecto muy importante, favorable para el conjunto de los edificios del hospital"* (Florensa, 1958c: 17).

In the square a bust of the doctor was placed over the already existing fountain in 1956 both the Works of Josep Manuel Benedicto (Fabre, Huerta, 2004. Artpúblic). The bust was intended to be placed in Las Ramblas but the Royal Academy of Medicine requested it to be located in the premises of their square with a plaque above "Barcelona to Sir Alexander Fleming". Other commemorative plaques were placed one of the Fire Department and the other of the city's slaughterhouse.



18. La fachada posterior del Real Colegio de Cirugía con el monumento a Fleming.



**Fig. 128** Back side of the Academia de Medicina with Fleming's fountain and monument (Florensa, Adolf 1962) On left sculptor José Manuel Benedicto working on Fleming's bust (Arxiu Habitat Urbà)

It was in the 1950s that the Gothic Quarter really came to be considered as an important touristic element of Barcelona as per the reviews of *Barcelona Atracció* magazine (Ganau, 2003). From these years on, Florensa was active in making the Gothic Quarter and the whole city more attractive to tourists, and increased his interventions in light of the future events like the 'Dia Mundial del Urbanismo' (World Urbanism Day) in 1950, XXXV Eucharistic Congress in 1952, and the 'Primer Congreso Nacional de Urbanismo' (1st National Congress of Urbanism) and Cerdà's Centennial in 1959. The neighborhood appeared in touristic guides with the intent of connecting its historical past to the present, and in 1951 the City Council and Florensa began by placing signs and banners in strategic touristic places with fictitious aerial views pointing relevant tourist sites (Esparza Lozano, 2014; Pose Méndez, 2012):

*"A partir de las campañas de atracción de visitantes, especialmente cuando en 1952 se realiza el Congreso Eucarístico Internacional y en 1959 el Centenario Cerdà, el Ayuntamiento inicia la señalización de los espacios turísticos mediante la colocación de carteleras anunciadoras en los puntos estratégicos de llegada y salida de turistas, proyecto dirigido en 1951 por Florensa. Una de las seis carteleras fue colocada en la avenida de la Catedral frente a la Pía Almoina, señalizando las oficinas de turismo, museos y archivos*

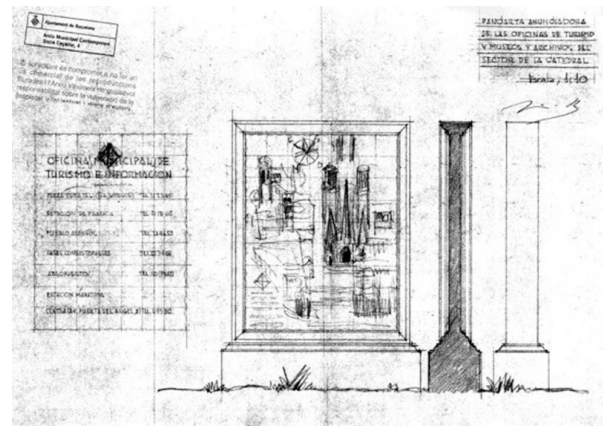
*del sector de la catedral. Estas pancartas anunciadoras construidas en piedra natural enmarcan el dibujo sobre cerámica de una vista aérea ficticia de este sector donde se señala la localización de los lugares turísticos” (Esparza Lozano, 2014: 242-43).*

Most importantly these developments and upcoming events were an additional excuse for Florensa to continue with the policy of restoring monuments and opening public spaces, particularly taking advantage of the Civil War’s damages and regenerating spaces that where destroyed due to the bombings.

After the approval of the Plan Comarcal in 1953, him and Vilaseca directed its partial plan for Ciutat Vella, ‘Plan Parcial de Ordenación del Casco Antiguo de Barcelona’, in 1956 – and later revised in 1959– focusing more on creating small-scale open spaces rather than street layouts based on the principles of ‘sanitation, circulation and aesthetics’ that reminds us of Giovannoni’s theory and principles.

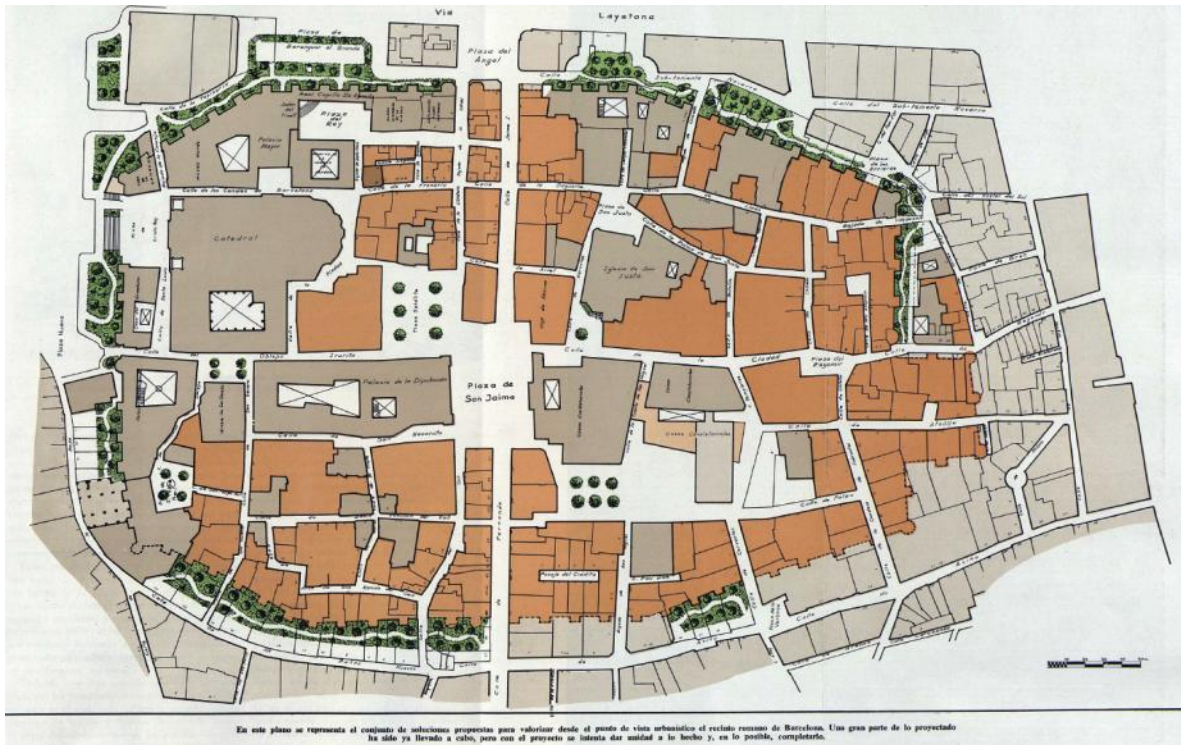


**Fig. 129** Touristic signs placed on Plaça de la Catedral (Caixa Estalvis Sgda. Família).



**Fig. 130** Above more signs that still exist nowadays and below tender drawings of the touristic signs (Florensa, 1930-1951. AMCB)

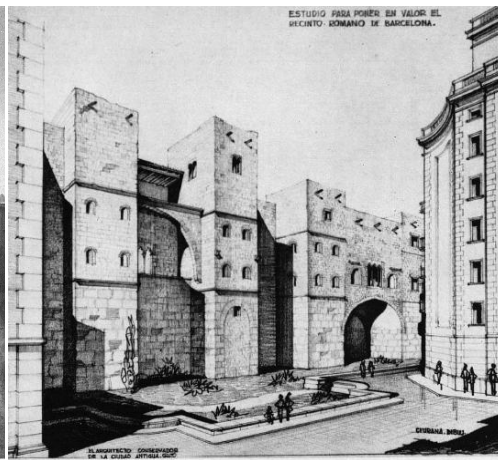




**Fig. 131** Plan with various solutions to enhance, conserve, and add value to the Roman precinct (Florensa, 1964)



**Fig. 132** The eight buildings on Avinguda Catedral recently demolished, in 1958, exposing the Roman walls (Florensa, 1964)



**Fig. 133** A study of the Roman walls in Subteniente Navarro street (Florensa, 1964)

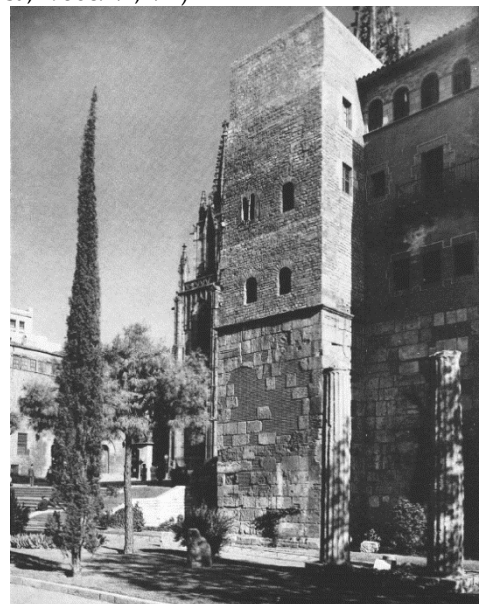
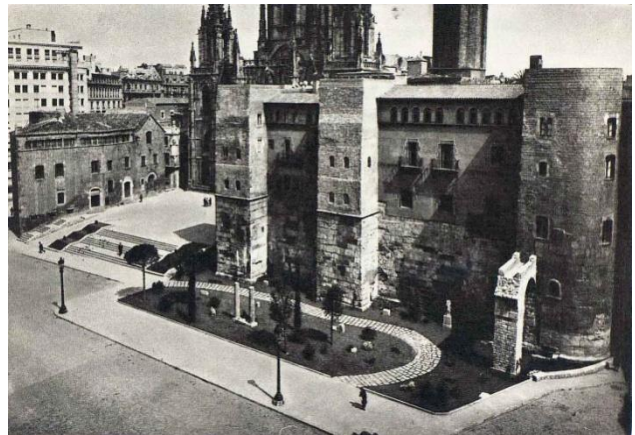
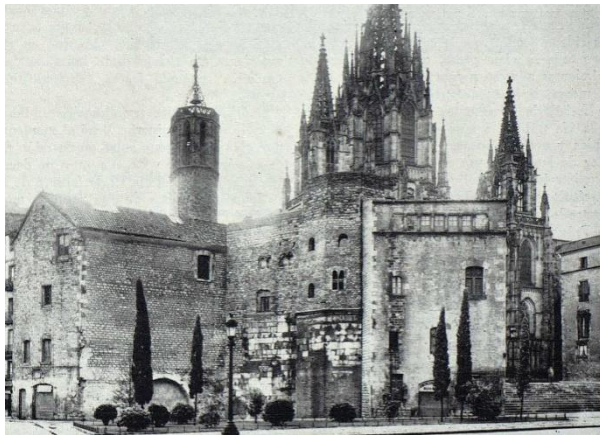




**Fig. 134** View of the houses backed onto Casa de la Pia Almoína and along the street leading to Plaça Berenguer el Gran in 1945 before being demolished and after in the 1950s (Ramírez Sagarra, 1945. AFB) (Florensa, 1964: 13)



**Fig. 135** Destruction of the houses covering the Roman Walls and Casa de l'Ardiaca before the final result of the furnished garden, towers, and arch of an aqueduct in 1957 (Florensa, 1958c: VI, VII)



**Fig. 136** Other views of the green space with the aqueduct and towers restored, as well as the combination of trees, greenery and archeological elements like the two columns (Florensa, 1954) (Florensa, 1964)

The Civil War subjected the Gothic Quarter to bombings that caused damages in the environs of the Cathedral. This made it easier for Florensa to start a series of selective demolitions in front of the Cathedral and finally open the Avinguda de la Catedral which originally corresponded to Cerdà's and Baixeras's Via C between Via Laietana and Plaça Nova (but was in fact missing from Plan Vilaseca). This process took place between 1947 and 1953 (Florensa, 1953) with the destruction of Carrer de la Corríbia's buildings, that supported Casa de la Pia Almoína, exposing the rest of the Roman Walls that begin from Plaça Berenguer el Gran: "[...] *en la actualidad las obras y excavaciones de la calles de la Tapinería nos dan más muros romanos que tendrán también de ser rodeados de jardines*" (Florensa, 1959: 29). The area was almost ready for XXXV Eucharistic Congress in 1952 where retouches were made all around the Cathedral particularly in Carrer del Bisbe.

Also in those years Florensa started to develop the reform plan for Plaça Sant Felip Neri and the rest of the affected spaces. However, it was when Josep Maria de Porcioles arrived to the City Council that the works on the square were carried out.

Between 1955 and 1958, the houses next to Plaça Nova on Avinguda de la Catedral were demolished widening the avenue and exposing a section of the Roman Wall, an aqueduct's arch, and two towers on which the new façade of Casa de l'Ardiaca is supported. This caused the disappearance of the existing streets like Carrer del Bou de la Plaça Nova and Carrer de Sallent. In their place at the foot of the wall, Florensa created a garden, based on the same principles as Plaça Berenguer el Gran, with dispersed archeological elements like columns and funerary monuments collected from previous excavations: "*Además de la restauración de los muros, se ha dispuesto a su pie un espléndido jardín, basado en los mismos principios que el de la plaza de Berenguer pero mejorado en muchos detalles*" (Florensa, 1959: 28).

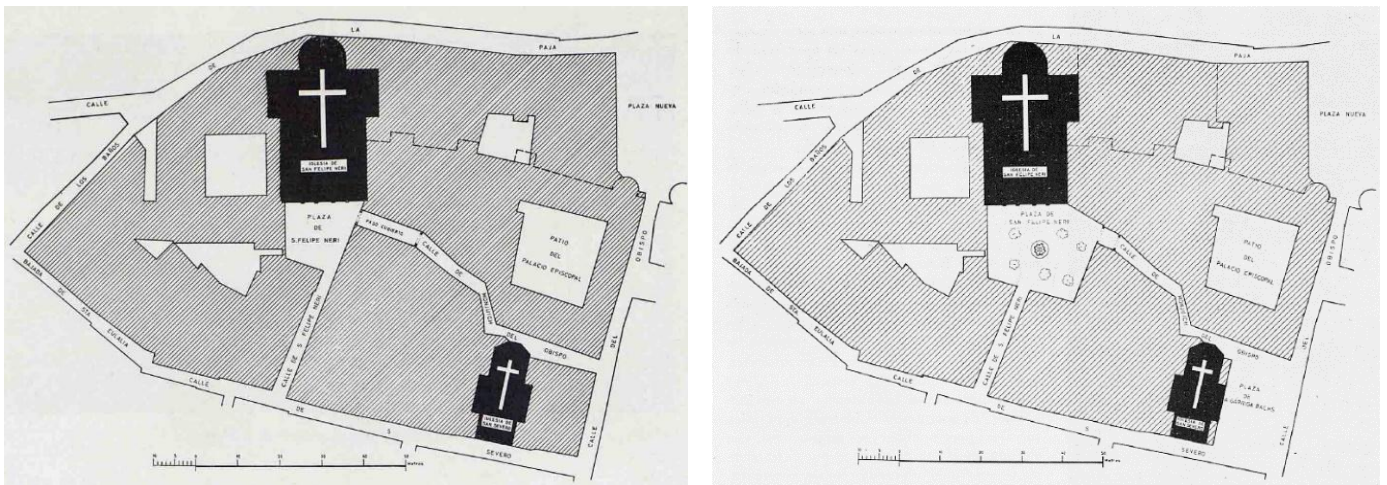
The whole area in the environs of the Cathedral was redeveloped including its stairs and entrance, Plaça Nova, and the streets leading to it that of Carrer dels Capellans, Carrer dels Arcs, Carrer dels Boters, and Carrer de la Palla. Florensa also designed Carrer Joaquim Pou offering by that an access to a series of old alleys and a view to the Cathedral. This redevelopment and realignment of streets paved the way to several open spaces that were urbanized many years later. They are known nowadays as Plaça Carles Pi i Sunyer on Portal de l'Àngel, Plaça d'Isidre Nonell, and Plaça del Vuit de Març both on Carrer dels Capellans where in the latter, after demolishing the existing building in 1988, part of the Roman aqueduct was discovered embedded in the party wall of the adjacent building and was kept exposed as part of the square's design.

### **Plaça Sant Felip Neri**

In Plaça Sant Felip Neri, the shelling from the air raid caused great damages and the death of around 80 people sheltered in the grounds of Sant Felip Neri Church. As a matter of fact, the square always existed, even before Plaça Garriga i Bachs was created, but was significantly smaller. Its existence date back to 1790 after removing the Montjuïc del Bisbe



cemetery following the Royal Decree of Carlos III and Carlos IV that imposed exhuming cemeteries in favor of open spaces and hygiene (García Sanchez, 2003). One part of the cemetery was used to build the church and convent and the other was left free forming the square itself. Two narrow streets lead to the square, San Felip Neri and Montjuïc del Bisbe streets, where the latter projected from Carrer del Bisbe between Plaça Garriga i Bachs and the Episcopal Palace and was famous for its narrow corners, archway, and bridge house that one crosses underneath to access the square. It was enclosed by the church and the convent on one side and simple buildings on the other side. *"Aunque la iglesia y convento de San Felipe no cuentan entre los monumentos de primer orden de nuestra Ciudad, a pesar de ser muy apreciables, la impresión que causaba la plaza era de un intenso labor de "Barcelona antigua" (Florensa, 1958b: 4).*



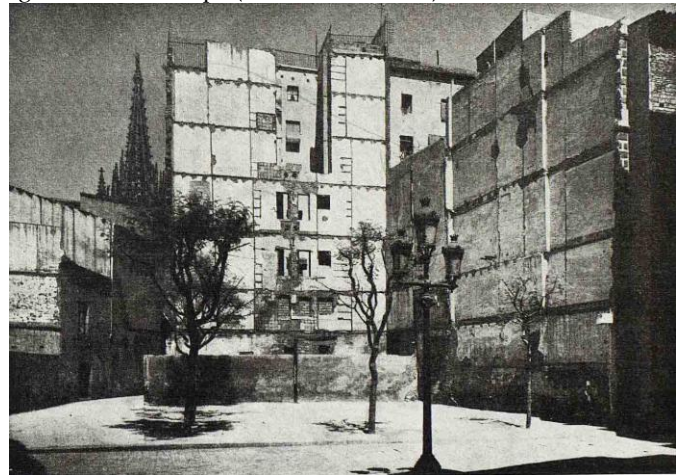
**Fig. 137** On left Plaça Sant Felip Neri in its original shape before its bombing in 1936. The size of the square was smaller, the bridge house was still there and notice that Plaça Garriga i Bachs did not exist yet (Florensa, 1958). On right Plaça de Sant Felip Neri after the project of Florensa with its bigger size, the reconstruction of the Gremis , and the placement of the fountain with Plaça de Garriga i Bachs on the bottom right (Florensa, 1958)



**Fig. 138** The square in 1942 with rubble and destruction (Ramírez Sagarra, 1942. AFB)



**Fig. 139** The square in 1952 with the pavement fixed and planted with trees but the surrounding buildings still in bad shape (Ribera, 1952. AFB)



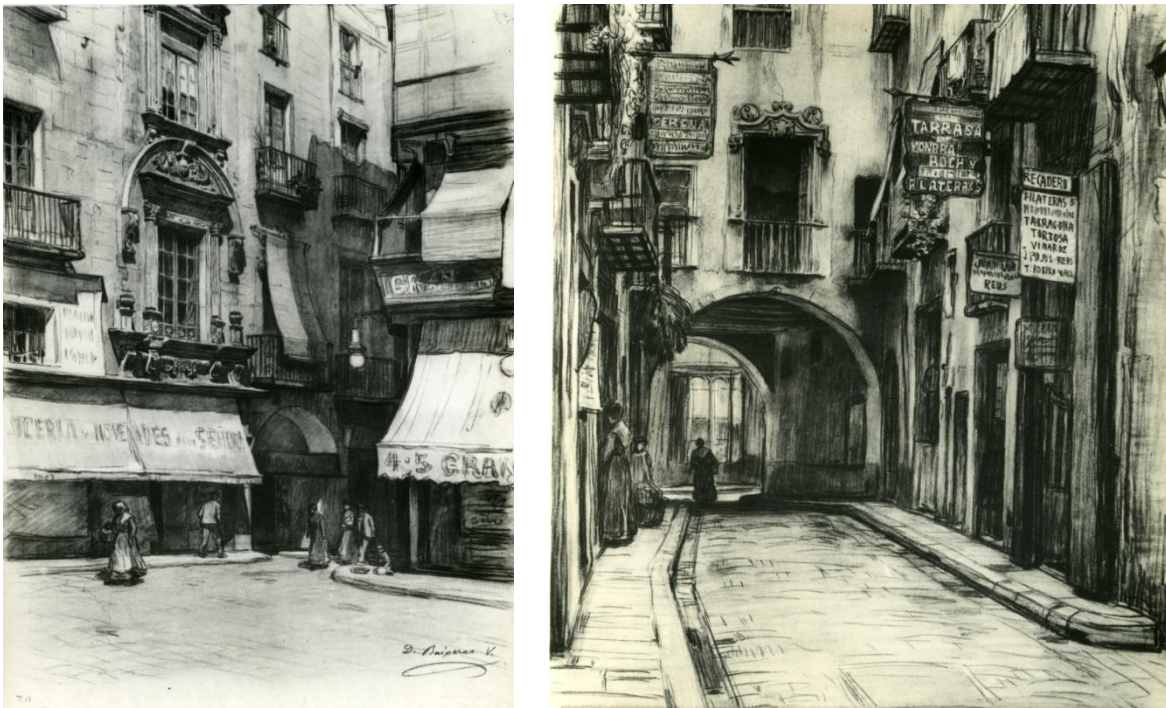
**Fig. 140** The situation of the the square in all its sides in 1958 right before being recreated with the exposed party walls, the empty plots and a few scattered trees and street lights (Florensa, 1958: 7) (Ribera, 1959. AFB)



On 30 January 1938, the whole space was badly damaged and the buildings including the bridge house destroyed except for the façade of the church and convent on which riddles from shrapnel are still visible nowadays. As a consequence the square's surface increased and was left with vacant plots and exposed party and dividing walls losing by that its charm. The square's state remained the same for many years until 1950s where it was cleaned up, simply paved, and planted with a few trees and street lights.

According to Florensa, in an ancient city that wants to preserve itself isolated monuments have no value on their own, what counts is the atmosphere and context that surrounds them: “[...] *en una ciudad antigua que quiera conservar su carácter, los monumentos aislados no son nada; los ambientes que los rodean son esenciales*” (Florensa, 1958b: 5, 6). And this is clearly reflected in all his reform interventions of the old town since the Plaça Berenguer el Gran. He elaborated his point of view in his article “Ciudades artísticas y pintorescas” published in *Barcelona* magazine in October 1955.

From this idea he began in 1958 reconstructing and recreating the whole square reclaiming its old and monumental character. He considerably increased the square's surface, restored the church and convent, and meticulously reconstructing the 16<sup>th</sup> Century façades of Casa del Gremi dels Calderes and Casa del Gremi dels Sabaters, similar to his work on Casa Padellàs in Plaça del Rei.



**Fig. 141** Dionís Baixeras's sketches of the Gremi dels Calderes in Carrer Borria with the arch that gives way to Carrer Filateras (Florensa, 1958b)

Casa del Gremi dels Calderes belonged to the family Mora and was saved from Carrer de la Boria destroyed with the opening of the Via Laietana and momentarily moved to Plaça Lesseps.

*"La casa dels Calderers, edificada al començament de la Boria (ns.3, 5 y 7) y demunt la volta de es Filateres, era un bell exemplar del Renaixement, conservat bastant íntegrament. En 19 Janer 1911, al ésser expropiada, s'acordà trelladar-la a la plaça de Lesseps o dels Josepets, habilitant-la per quarteret de bombers y altres dependències municipals. [...] Carrer de les Filateres.- Anava de la Boria al carrer de l'Oli. S'entrava per una volta de la antiga casa dels Calderers, que s'ha restablert a la antiga plaça dels Josepets o de Lesseps ab la predita casa gremial. [...] Carrer de la Boria [...] antiga Via Augusta de la època romana, dita Vía Francisca en la dominació franca (segles IX y X) [...] Los Calderers hi tingueren sa bonica casa gremial, puig lo carrer començava abans del 1860, en la casa que ara era el n. 3 de la plaça del Angel. Boria avall eran passats los condemnats a la vergonya o a assots y també les processons de gent condemnada per la Inquisició, al anar a Santa Caterina"* (Carreras Candi, 1916: 98-100-101).



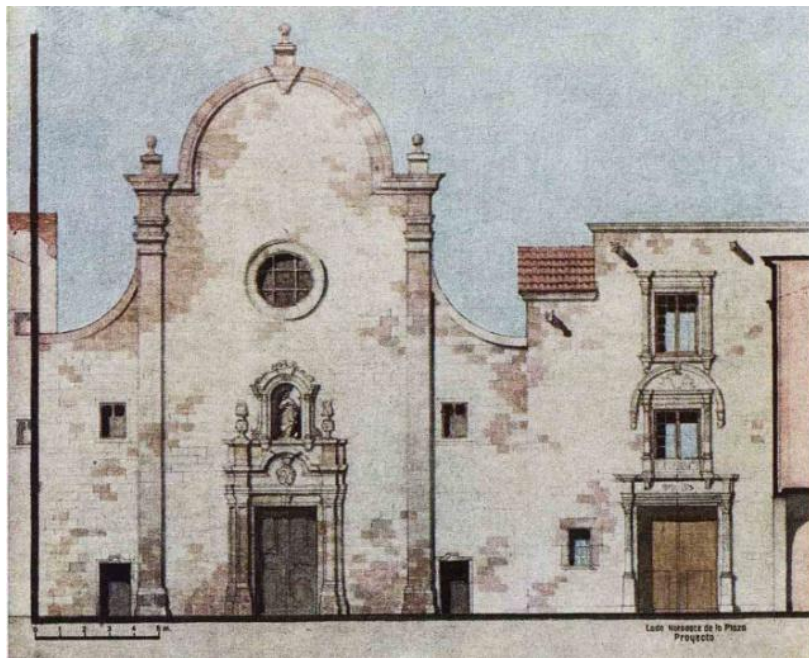
Fig. 142 The Gremi dels Sabaters in 1913 before destroying Carrer de la Corribia (1913, Arxiu Mas) and detail of Sant Marc's lion a sign of the shoemaker masters (Duran i Sanpere, 1972, 1975)



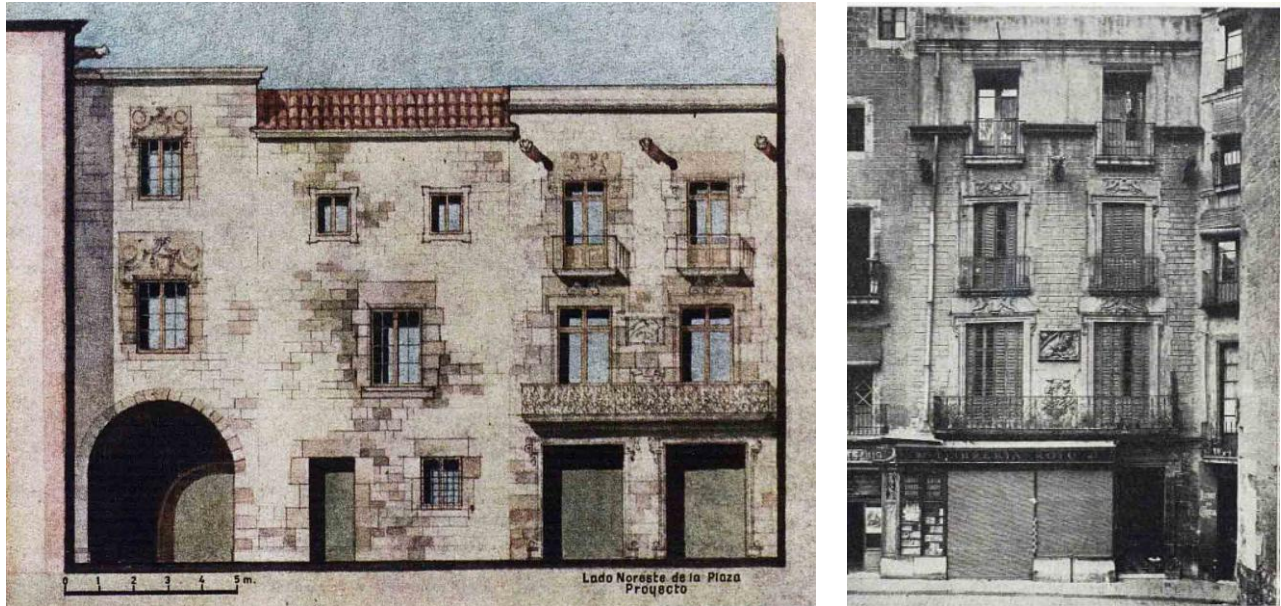
Casa del Gremi dels Sabaters was dismantled and stored after the destruction of Carrer de la Corríbia on Avinguda Catedral.

*“La casa gremial dels mestres sabaters, en el desaparegut carrer del Corríbia, i reconstruïda a la plaça de Sant Felip Neri, tenia un gran relleu a la façana, amb el lleó alat i nibat entre quatre escutets amb sengles sabates. Això no obstant, el seïnal heràldic els sabaters era la representació de llurs pròpies obres, a parells, quan el lloc donava per a tant. [...] Però hi hagué al mateix temps a Barcelona uns altres lleons, almenys en efígie. N’hi havia d’esculpits en pedra, brodats en banderes, pintats en portades de llibre i en altres diverses formes. Aquests lleons eren símbols de dos gremis: el dels mestres sabaters i el dels blanquers” (Duran i Sanpere, Vol.3 1972-1975: 372).*

The plot adjoining the church belonged to a religious community, ‘La Comunidad de los Padres del Oratorio de San Felipe Neri’, that accepted to reconstruction of Casa del Gremi dels Calderes’s façade to their building where Florensa adapted one half of the façade to their buildings. The other half on the other side adjoined with the façade of Gremi dels Sabaters and its arch, after being restored into an entrance to the square.



**Fig. 143** Half of Casa del Gremi dels Calderes’s façade reconstructed adjoining the church of Sant Felip Neri after being moved from Plaça Lesspes where its façade was still joined as seen in the picture on the left (Florensa, 1958b: 9,15)



**Fig. 144** The rest of Casa del Gremi dels Calderes's façade reconstructed above the arched entrance with Casa del Gremi dels Sabaters on the far side without the last floor unlike the house's former state in Carrer de la Corríbia as shown in the left photo (Florensa, 1958b: 9,15)

The empty plot right next to the arch and the new Calderes façade was a municipal property that was built giving the façade to Casa del Gremi dels Sabaters. Florensa eliminated the top floor to maintain the balanced height of the space and enhanced the Gothic style of the facade. Therefore, with the aim of creating a picturesque and harmonious atmosphere, the old materials –masonry stone, lintels, reliefs, gargoyles, cornices etc.– of the façades were respected and used to compose a historical ensemble integrated with the new materials, technology and construction system of the time.

*"Ambas casas corresponden al siglo XVI, momento de gran delicadeza en la arquitectura de nuestra patria, pero que, por razones de varias clases, especialmente políticas, está escasamente representado en Barcelona, lo cual aumenta el interés de in reconstrucción de estas fachadas en un ambiente tan apropiado como la plaza de San Felipe Neri"* (Florensa, 1958b: 12).

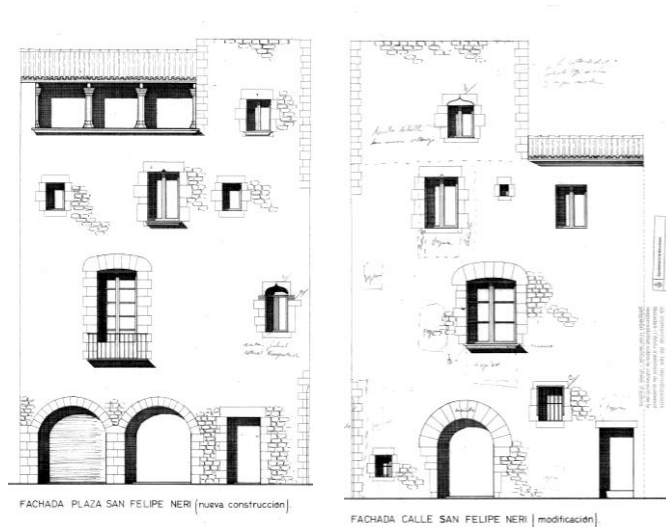
As for building with the party wall it was the headquarters of the 'Sociedad Economica de Amigos del Pais' and Florensa transformed it by dismantling parts of the façade on Carrer de Sant Felip Neri such as the window and balcony set. The rest of the elements were made from Montjuïc sandstone. The convent was also remodeled by prolonging its façade and adding cornices and windows. And the "modern" building next to it, although it disrupts the squares's harmony, was also restored, painted, and arranged with moldings and 'esgrafiados'. Once the buildings were reconstructed and restored the development of the square started by planting new trees, installing street furniture and lights, and pavements. By this stage Florensa had already retired and the rest of the project was



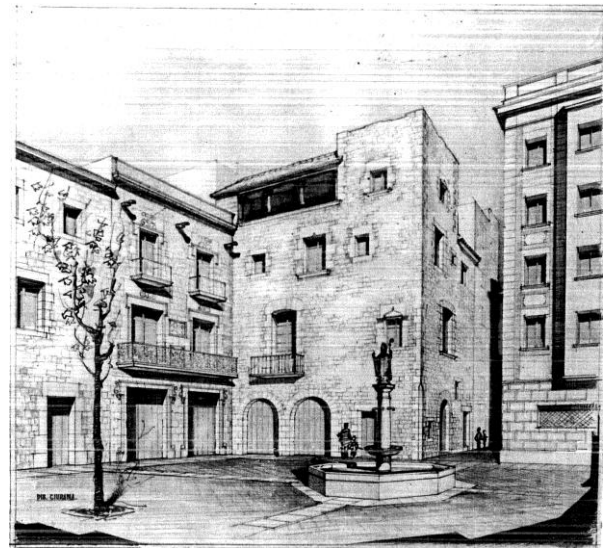
carried out by architect Joaquim Ros de Ramis, his successor to the 'Servicio para la Conservación y Restauración de Monumentos' (Peiró, 2002).

*"Creemos interesante la realizacion de este programa porque, volviendo a las anteriores ideas sobre la importancia de los ambientes de conjunto, observamos que la plaza de San Felipe Neri se encuentra situada en una zona de gran interés.*

*Ya en un reciente estudio, dedicado al Barrio Gótico (1), hemos hecho hincapié en que puede ser considerada como una ampliación del mismo; y con perfecto derecho, pues abundan en ella las casas realmente góticas más que en el propio barrio así llamado, donde apenas hay alguna"* (Florensa 1958b: 12).



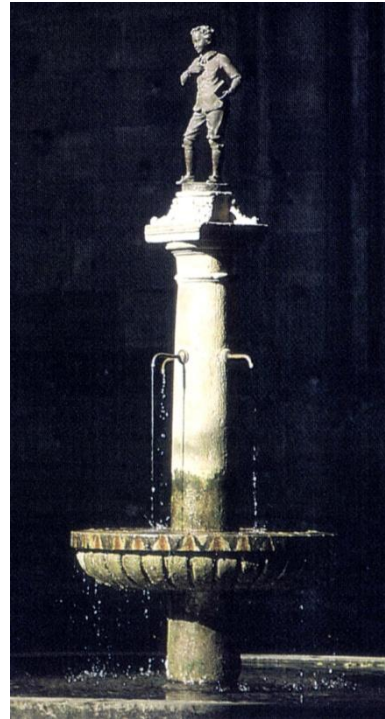
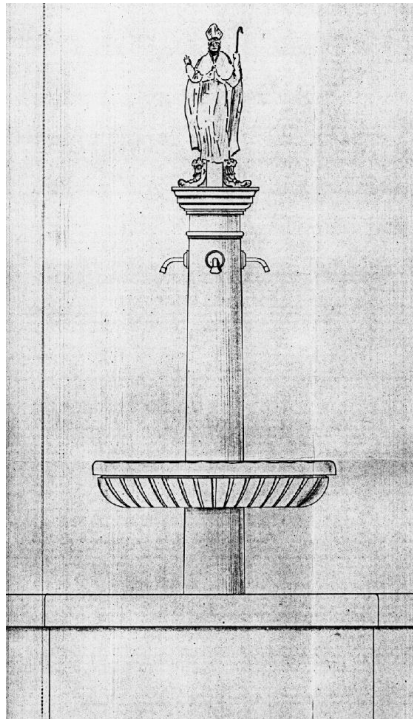
**Fig. 145** On the left party wall converted into a façade with elements from the façade on the right (AHCB)



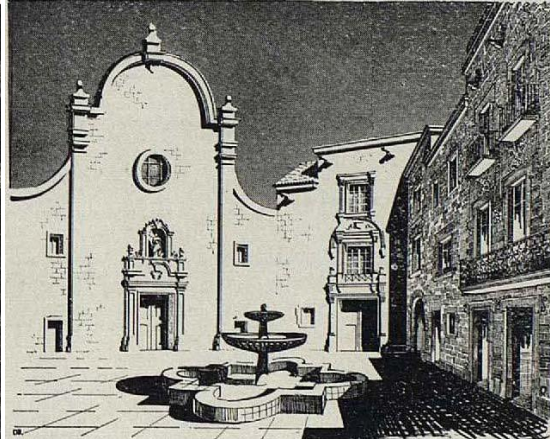
**Fig. 146** Perspective of the square with the new façade (AHCB)

Joaquim Ros de Ramis designed an octagonal fountain placed in the middle of the square originally with the sculpture of Sant Sever: *"One of Florensa's fellow municipal architects, Joaquim Ros de Ramis, designed an octagonal fountain with a sculpture of St Sever on the central column, which was located in the middle of the renovated square.*

*The square was reopened on 18 July 1962, but a year later the statue of St Sever was stolen, and Josep Miret, the sculptor responsible for the original, was commissioned to make a replacement. This time, instead of the bishop of Barcelona, Miret sculpted the figure of a student, which in the late sixties suffered the same fate as its predecessor. Since then it has never been replaced. In 2009 the fountain has been largely restored, removing La Bisbal ceramic tiles reproducing the original ones"* (Fabre, Huertas, 2004. Artpúblic).



**Fig. 147** Plaça de Sant Felip Neri project of the fountain with the sculpture of Sant Sever (Arxiu Habitat Urbà) and the sculpture of the 'Estudiant' (Arxiu Urbanisme)

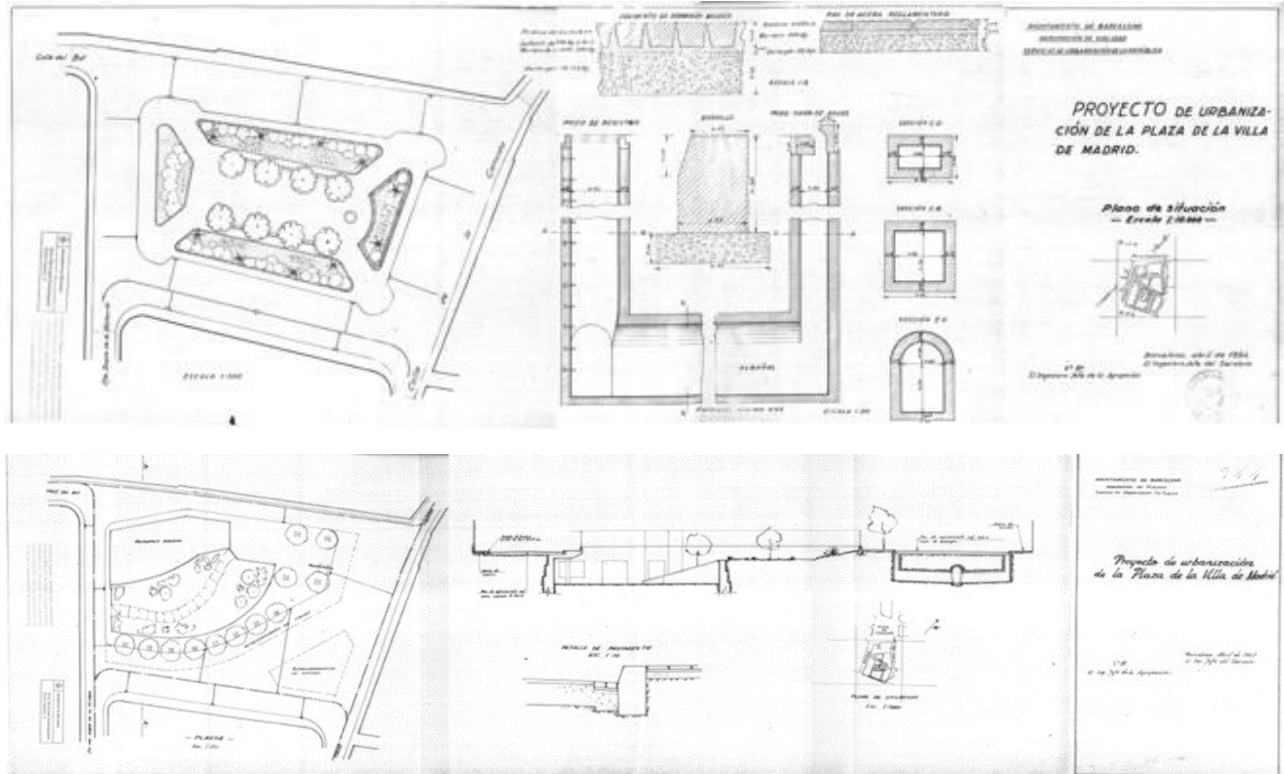


**Fig. 148** The square in 1962 totally finished with the Gremis reconstructed and in the left photo the fountain stands with the first sculpture of Sant Sever on the top before being stolen (Florensa, 1958c) (Florensa, 1958)

### Plaça Vila de Madrid

The same three municipal services also participated in archeological findings and heritage conservation beyond the Cathedral neighborhood. It was an initiative by Mayor Porcioles who according to Florensa gave concrete orders to further study and create a form of archeological ring or circuit all around the 'roman city', meaning Ciutat Vella, combining walls, historical precious findings, and open spaces which will give Barcelona exceptional interest and beauty:

*“[...] con la iniciativa predilecta del actual alcalde, Don José M de Porcioles, que ha dado órdenes concretas para estudiar una manera de anillo arqueológico alrededor de la ciudad romana, combinando murallas, espacios libres y museo lapidario al aire libre, que dará a Barcelona un interés y una belleza verdaderamente excepcionales” (Florensa, 1959: 29).*



**Fig. 149** Project of Plaça Vila de Madrid. Above first proposal in 12 April 1954, and below second proposal in 4 April 1957 (1956. AMCB In Esparza Lozano, 2014)

Which brings us to another of Florensa's 'esponjamiento' projects Plaça Vila de Madrid. The square has an important urban significance because it not only consists of opening a space but of uncovering and exhibiting a series of Roman ruins and sepulchers buried in the square.

The 'esponjamiento' of Plaça Vila de Madrid was made possible due to the demolition of the 1588 Discalced Carmelites Convent burned in 1936, during the Civil War, as well as several buildings destroyed by bombings. Therefore, and as a consequence of the war, it was already decided since 1944 to open in its place a square which will bring salubrity, ventilation, and allow the entry of light and air in that dense area.

*“Es deixava així de banda l'anterior sistema de reforma urbana, basat en 'l'obertura de carrers', i es passava a proposar un 'esponjament' o buidatge urba, el qual, mitjançant la creació tant de places com d'altres espais, permetes donar aire i llum als teixits i ajudes així a recuperar-los i millorar-los” (Peiró, 2002: 51).*

*“L'any 1944 es decideix ordenar la superfície que havia estat ocupada per les dependències del convent i alguns edificis afectats pels bombardejos que es va haver d'enderrocar, amb la*



*qual cosa es creà una àrea oberta, una mena d'esponjament del barri, una operació molt típica dels corrents higienistes del moment” (Beltrán, 2009: 6).*



**Fig. 150** View of the corner Carrer d'En Bot and Carrer Canuda after demolishing the existing buildings (Beltrán, 2009)



**Fig. 151** The first discovery of the Roman necropolis in 1954 (Fabre, Huertas, 1988)



**Fig. 152** Site still in excavation in 1956 (Unknown, 1956. AFB)

In 1954 while constructing a residential building, a project of Florensa and M. Cases Llimona, the remains of a Roman necropolis was accidentally discovered. In collaboration with Duran i Sanpere, they first proposed to open the square and transfer the sepulcher to a museum since the terrain where it was found belonged to the Caixa de Pensions. However, in 1957 with the demolition of the remaining houses built by the Caixa de Pensions numerous burials were discovered, aligned on both sides of the terrain, among



several others found along the ancient Roman sepulchral road leading up to Plaça Nova (Peiró, 2002). Due to that, a new project was drafted with a different layout maintaining the Roman necropolis in its place.

*“El hallazgo casual de una tumba al abrir los cimientos de una de las casas de la Caja de Pensiones, condujo, cuando las circunstancias lo permitieron, a una exploración sistemática de lo que ha resultado ser una necrópolis romana, de época aun pagana, formada a lo largo de un camino que partía de la ciudad abierta, pues sus muros fueron posteriores. Entre todas las soluciones posibles, traslado a un museo, espacio cubierto, etc., se escogió la más atrevida; dejar la necrópolis abierta, más profunda que el resto de la plaza y rodeada de jardín”* (Florensa, 1959: 29).

Florensa along with Riudor director of ‘Dirección de Parques y Jardines’ designed this new public space as a square-garden exposing the archeological findings in situ and integrating it with the dynamics of the square and the city creating an affiliation between heritage and urban landscape. The square became another reference to this type of projects where urban landscape and heritage are combined.

*“Adolf Florensa, arquitecte municipal, va concebre aquest nou espai públic com una plaça enjardinada amb el jaciment arqueològic integrat en la dinàmica de la ciutat, tot un referent per a l’època en la definició de patrimoni i paisatge urbà”* (Beltrán, 2009: 6).

*“La plaça Vila de Madrid no tan sols representa el darrer i màxim exponent del neoclassicisme promulgat i defensat per l’arquitecte Adolf Florensa, sinó que ha esdevingut un referent en la concepció i definició dels paisatges urbans”* (Pastor, 2009: 5).

Moreover, it allowed an articulation with the surrounding buildings where Florensa participated in the architectural design of the façades delimiting the square and creating a strong compositional unity in the whole space (Pastor, 2009).

The result is a multi-level diverse space with a half-sunken appearance providing a different experience on each of its corners.



**Fig. 153** The different levels of Plaça Vila de Madrid with the Roman sepulchral road integrated with the garden and paved pathways (Florensa 1958c) (Florensa, 1959)

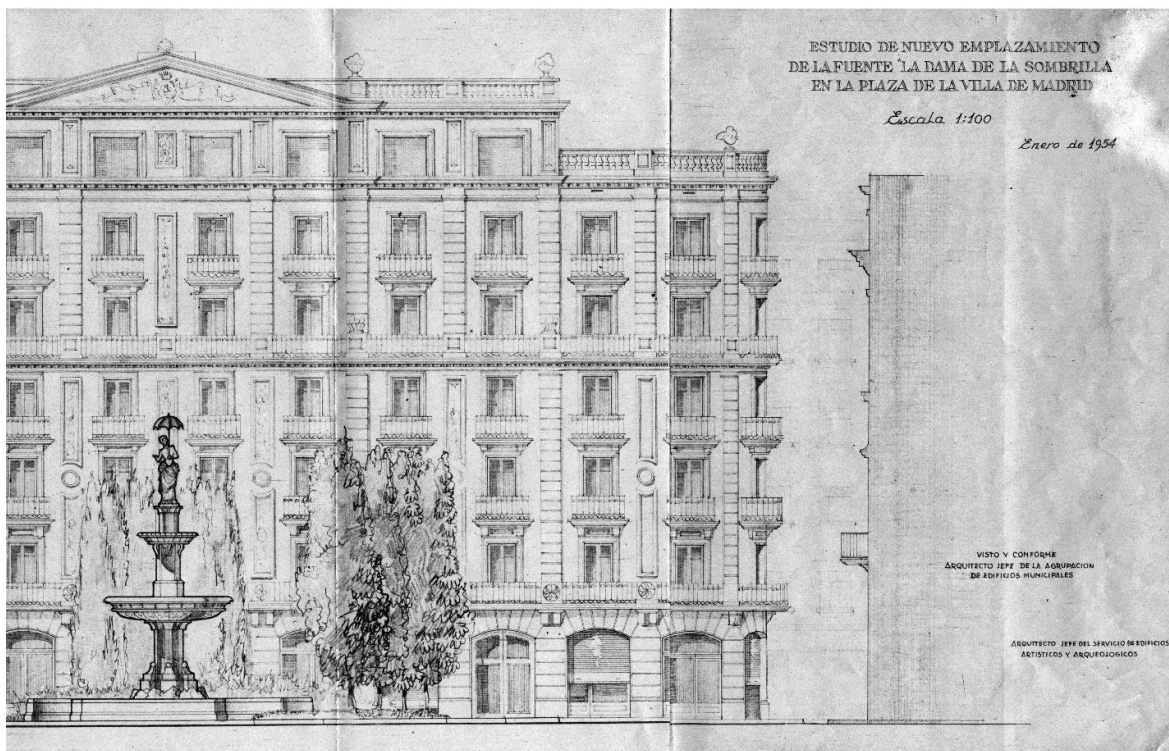
From the side of Carrer d'En Bot and Carrer Francesc Pujols a sidewalk on the street level is maintained forming a high terrace from which allows a clear view of the conserved ruins below. On the opposite eastern side, the sidewalk paved with gravel is landscaped with grass and trees and descends gradually in a gentle slope from the level of the street to the site of the ruins. The square had an access for cars paved in asphalt and the rest of the upper level in panots.

*“En cuanto a los pavimentos, en el nivel superior, las aceras se pavimentan con panot y la calzada con asfalto, mientras que el camino que descende hacia las ruinas se pavimenta con grava y se utilizan adoquines para construir los escalones y sus límites de separación.*

*La plaza fue inaugurada el 25 de septiembre de 1958, en el marco de celebración de las fiestas de la Mercè, junto con la instalación de la fuente y el descubrimiento de un rótulo donado por la Casa de Madrid de Barcelona. Al acto asistieron un gran número de vecinos y contó con la presencia del alcalde de Barcelona, Jose M<sup>a</sup> de Porcioles, y el alcalde de Madrid” (Esparza Lozano, 2014: 240).*

In the corner of Carrer d’En Bot and Carrer Canuda a resting area is formed with a fountain decorated by the ‘Maja madrilenya’ (Fabre, Huertas, 2004. Artpúblic) a sculpture by Lluís Montané and dedicated to the city of Madrid from which the square takes its name.

A little-known matter in reference to this square is that, in the beginning, its urbanization involved re-installing the fountain and sculpture of “Dama del paraguas”, the work of Joan Roig i Solé (1884), which had been since 1885 located in park Ciutadella. Instead it was relocated in the grounds of Barcelona’s zoo in 1957.



**Fig. 154** Study of the new placement of the fountain ‘Dama del paraguas’ in the square in January 1954. It corresponds to a time in which the project did not consider the treatment and use of the archeological remains (Archivo Habitat Urbà)

On 25 September 1958, both the square and the fountain ‘Maja madrilenya’ were inaugurated by Mayor Porcioles and Mayor of Madrid during the annual La Mercè Festival.

Since then, the square has passed through several reformations the first being in 1995 after it was declared a 'Bé Nacional d'Interes Cultural' (National asset of cultural interest) by the Generalitat de Catalunya, and another between 2000 and 2002. During the latter years the whole square was regenerated and remodeled by Toni Casamor, from BCQ architects, who converted the square's perimeter into a pedestrian area with new granite pavements and urban furniture prohibiting by that the entrance of cars. The access to the archeological site was enclosed by a metallic gate-like structure to ensure security but maintained visibility. Moreover, in the corner of Carrer d'En Bot and Carrer Francesc Pujols a pedestrian footbridge was introduced that crossed above the ruins providing by that a better connection and circulation and an overhead view of the Roman sepulchral road (Beltrán, 2009). The ruins became once again an object of a multidisciplinary investigation<sup>96</sup> between 2003 and 2006 that allowed the discovery of more tombs. And in 2009 the 'Necrópolis de Vila de Madrid', as is known nowadays, was opened to the public as a new center of the Museu d'Història de Barcelona (MUHBA).



**Fig. 155** View of the Plaça Vila de Madrid with its different levels and ruins on its inauguration day in September 1958 (Beltrán, 2009)

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<sup>96</sup> The square became a pioneer in the subject and study of funerary gardens that brought together a group of archeologists, archeobotanics, biologists, and palynologists. In 2005 it became part of a national study of 'Arqueologia dels jardins en la Hispània romana', and in 2006 it was integrated within the international study of 'Cultural landscapes of the past: Recovering crop fields and gardens in archeological parks of Europe' (Beltrán, 2009).





**Fig. 156** Whole view of the square in 1967 with the 'Maja madrilenya' on the far left. Note that during that time cars could still access the square's premises before it became in later years a pedestrian area (Ribera, 1967. AFB)

During Porcioles's mandate, other squares were created while Florensa carried out his conservation work in Raval neighborhood. The first, **Plaça de J. M. Folch i Torre** and the second, **Plaça Vicenç Martorell** both part of the series of small-scale squares that were in ecclesiastic hands before being confiscated in the 18<sup>th</sup> and 19<sup>th</sup> century.

After the confiscation of the first Paül convent where now Plaça de Castella stands, in 1833 the order built a second Paül convent next to the walls of Sant Pau del Camp. In 1839, after its burning and confiscation in 1836, it was converted into a prison. The prison remained intact until the Civil War where it was destroyed in 1936 and its plot left empty as a ditch. It was converted into Plaça de J. M. Folch i Torres and inaugurated by Porcioles in 1957. During the early democratic period in 1985, some alterations were made to the square carried out by architect Rosa Maria Clotet and included a commemorative fountain and monument 'A Jospe Maria Folch i Torres' (Fabre, Huertas, 2004. Artpúblic) designed by Josep Ricart.

The second space housed the convent of Bonsuccés before being burned down in 1835 to become a military utensil warehouse and later a barrack. During the Civil War the convent and church were demolished except for one tower-like part of the convent on the side of Plaça del Bonsuccés which came to accommodate several municipal dependencies (Fabre, Huertas, 1988). In the mid 50s the 'Patronat Municipal de l'Habitatge' constructed a

building adjoining the tower and consisted of 48 flats and 15 shops with porticos on the first floor leaving the rest of the area vacant. In 1957 while Florensa was in charge of remodeling the tower, the vacant area was urbanized into Plaça Vicenç Martorell Otzet designed with a mixture of greenery and soil and a big playground. In the square, 'La Barca' (Fabre, Huertas, 2004. Artpúblic) sculpture, designed by Gabriel Alabert, was unveiled in 1961 being one of the ten sculptures to win a public art competition launched by the City Council and the Parks and Gardens Department between 1959 and 1961 as a policy of embellishing and providing public monuments for some green areas in the city.



**Fig. 157** The women's prison on Carrer d'Amàlia just before getting demolished in 1936 to create Plaça de J. M. Folch i Torres (Pérez de Rozas, 1936. AFB)



**Fig. 158** Plaça Vicenç Martorell's ensemble with porched building and the tower on the far right (Florensa, 1958c)

Eventhough it was basically a study, it is also important to mention again Florensa's Plan for the Ribera neighborhood (1957) because it followed the same principles of rejecting the 'eventrement' of the old town in favor of 'esponjamiento', and moreover, because it was

incorporated into the second version of the 'Plan Parcial de Ordenación del Casco Antiguo' approved in 1959 (Florensa, 1958c).

The proposal was also another initiative of Mayor Porcioles. As in the rest of the old town, Florensa saw that the houses almost without exception rose two to three stories making the already narrow streets darker and more humid. The series of gardens, open spaces, and large convent courtyards that ventilated the houses were being covered with tight masses of buildings divided into many small and dark flats. And the remaining of the small squares and gardens that introduced a bit of light and air to the neighborhood were thanks to the Royal Decree of Carlos III and Carlos IV, discussed earlier, that suppressed cemeteries for hygienic reasons (Florensa, 1957; García Sanchez, 2003).

As previously discussed in this chapter, Florensa suggested several improvements to the narrow streets as well as conserving and restoring the emblematic buildings especially on Carrer Montcada. He also strategically distributed open spaces along the streets by partial or full demolition of buildings, including landscaping the existing ones like Fossar de les Moreres in front of Santa Maria del Mar church which used to be a cemetery.

By the time Florensa proposed this plan for the Ribera, Plaça de Sant Cugat had already been created around 1941 replacing the church of the same name burned in 1938 as a consequence of the Civil War, and in the 1990s its size was increased.

Some of his other proposals were created many years later, in the democratic era, such as the square between Carrer de Cremat Gran and Carrer Flassaders known nowadays as Plaça de Sant Jaume Sabartés that replaced a building block, and in 2007 was remodeled after adding a new research building to Picasso Museum; Plaça de Jacint Reventós on Carrer de l'Argenteria in 1982; and Plaça de Victor Balaguer on Carrer de la Nau.

Florensa concluded that *"La idea fundamental de este último, concretada, más que en trazar nuevas calles , en crear espacios libres de extensión moderada, pero bien distribuidos , dando por resultado una disminución de densidad, un «esponjamiento», orientaba ya a aquél"* (Florensa, 1958c: 21). Literally meaning that rather than tracing new streets it is better creating free spaces of moderate size well distributed resulting in a decrease in density, an 'esponjamiento'.

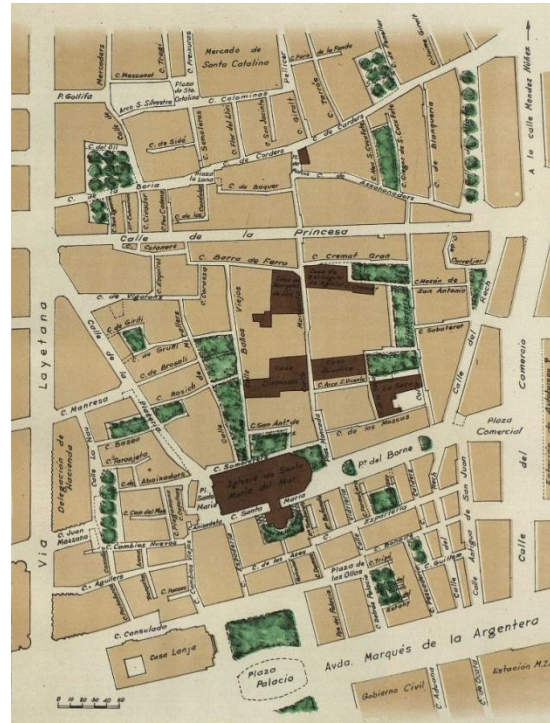
By that he echoed and verified the basic principles and concepts of Giovannoni and the GATCPAC concerning hygiene and the old town. The first deriving from the horticultural techniques metaphoric solutions of grafting and pruning the city –the Diradamento theory– instead of large destructions and rectilinear axes. This procedure is in most cases the solution in reconciling the three principles of planning, circulation, artistic aspect, and hygiene: *"La solution qui permet d'atteindre cet objectif en conciliant les trois principes de l'aménagement – c'est-à-dire la circulation locale, l'aspect artistique locale et les exigences de l'hygiène – est dans la plupart des cas l'aménagement par éclaircissage"* (Giovannoni, 1998: 286). And the second with their intervention on District V or Raval calling it *"una intervención más de cirujano, que de arquitecto"* (GATEPAC, 1934: 17) where, instead of opening axes and roads, infected buildings and spaces should be precisely and 'surgically' dismantled and replaced by public spaces and necessary equipments in order to provide the needed



sunlight, ventilation, and quality of life without destroying the city's urban fabric or affecting the historic and artistic heritage.



**Fig. 159** Plan of La Ribera neighborhood showing its high density, a shortage in squares and gardens, and abundance of narrow roads, some with no exits and others covered with vaults (Florensa, 1957)



**Fig. 160** And the same plan showing Florensa's suggestions of organizing the neighborhood and providing air and sunlight without opening new roads but rather strategically replacing a few buildings with squares and gardens (Florensa, 1957)

All the plans and proposals for Ciutat Vella were to reform, transform, and regenerate the city to the better. Even though it was planned with good intentions, the Via Laietana was a long and costly process with several deficits. Its objectives were to provide salubrity, connection, accessibility, and modernization of the Old Town, but it caused a lot of historic, artistic and patrimonial destruction. However, without it many policies, methods and small public spaces would not have existed. The Via Laietana and its damages were a catalyst and a key point that influenced and caused several matters. First, it indirectly awakened the heritage spirit and the need to protect and recreate the city's monuments and thus, the idea of the Gothic quarter was born. Second, it was a large-scale project and despite the destructions –for the sake of hygiene– its expected effect was not; probably in its proximity but not on the entirety of the city. Instead, new urban tactics and solutions, such as selective destructions and 'esponjamiento', were applied to fulfill the objective of hygiene and create small punctual strategic spaces and squares.

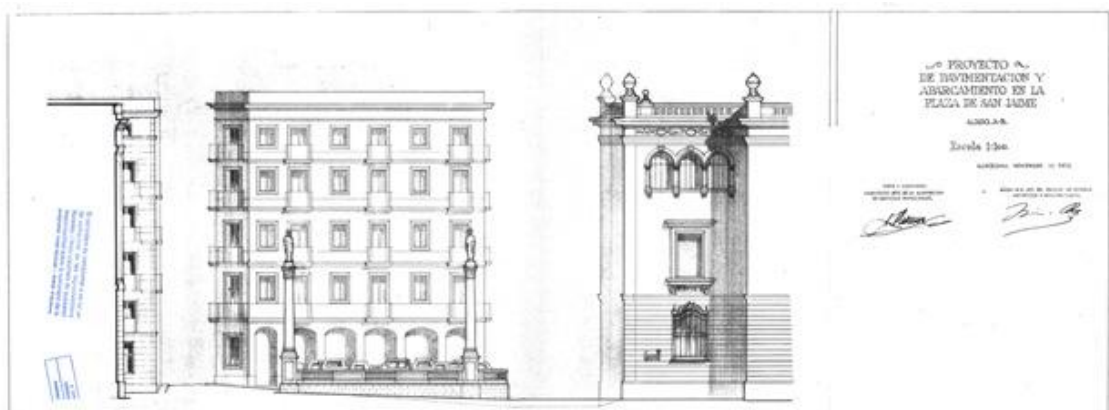


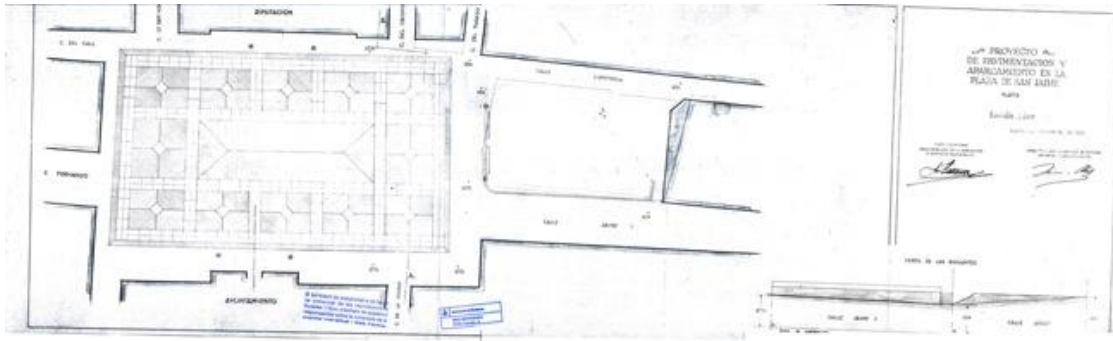
*“La timidesa de la intervenció en el conjunt de la ciutat vella va impossibilitar l’objectiu de sanejament en conjunt de tot el casc antic inherent a la reforma heretada del segle XIX” (Nicolau, Fuster, Venteo, 2001: 28).*

Through Florensa, and in the context of renovating the Historic Center, a series of interventions of pavements furthermore emerged being that *“el plano horizontal interviene en la creación de un ambiente histórico acorde con las restauraciones del patrimonio arquitectónico de la ciudad”* (Esparza Lozano, 2014: 243). In addition, he coordinated a series of pavement operations that we can call symbolic. *“A veces es necesario dar a nuestro suelo una nota de color que lo diferencia del pavimento funcional. Este film es un intento de dar a conocer algunos de los pavimentos artísticos de Barcelona. La dirección artística de estos pavimentos se debe a: Adolfo Florensa, Jorge Ros y Juan José Tharrats”* (Ballesteros Farre, 1971).

Among these distinguished interventions are those of Plaça Sant Jaume, Plaça Catalunya and Las Ramblas. As Esparza pointed out, *“la pertinencia de esta intervención de carácter ornamental por la importancia de los edificios que alberga y por la creciente llegada de turistas”* (Esparza Lozano, 2014: 244):

*“Aunque el movimiento comercial moderno se aleje cada vez hacia los barrios próximos a la Diagonal, la persistencia en la plaza de los órganos de gobierno popular mantienen su carácter y actividad. En los últimos años esta vida, en vez de disminuir crece empujada por una fuerza nueva; el turismo, cada vez más intenso. En efecto, las calles y los monumentos que más visitan los forasteros, son los situados en las inmediaciones de la Plaza de San Jaime; y en la buena estación es raro no encontrarla totalmente ocupada por grandes autocares de los últimos modelos y de las más variadas procedencias”* (Florensa 1953 (AMCB 1951) in Esparza Lozano, 2014: 244).





**Fig. 161** Florensa's parking and pavement project in Sant in November 1953 (1951. AMCB In Esparza Lozano, 2014)

The project was approved in an extraordinary of the municipal plenary on June 15, 1957 when Mayor Porcioles took the opportunity to affirm that: *"es conveniente destacar, por cuanto constituye un viejo deseo la aprobación de un proyecto de pavimentación y ornamentación de la plaza de San Jaime, que ha de ayudar a resaltar su clásica belleza"* (LVG 1957-06-16, p.9). And the project of Plaça Sant Jaume itself induced a new pavement for Carrer Jaume I.



**Fig. 162** Florensa's pavement designed for Plaça de Sant Jaume (CR Polis. UB)



**Fig. 163** La Rambla pavement with the newspaper kiosk designed by Josep Alemany between 1938-1939 (Alemany Barris, 1972)



**Fig. 164** Miró Pavement, 1976. "When Joan Miró (1893-1983) was approached in 1968 with a project to design a mural for the new terminal at Barcelona Airport, he not only accepted the commission but agreed to deliver three works that would serve to welcome visitors to the city on their arrival by air, land and sea. True his word, every six years he furnished a work, each one very different from the other, to greet visitors who arrived in Barcelona by air (the mural, a ceramic construction by Llorens Artigas, was set into place in 1970), by sea, with the pavement in the Pla de la Boqueria, inaugurated on 30 December 1976, and finally for those who arrived by road along the Gran Via de les Corts Catalanes, with a monumental "Woman-Mushroom" phallic sculpture capped by a moon, better known as "Woman with Bird", situated in the former Parc de l'Escorxador, now called the Joan Miró Park" (Fabre, Huertas, 2004. Artpúblic)





**Fig. 165** Aerial view of Plaça Catalunya and its artificial pavement (1962, ICGC)



## **4** POST-WAR URBAN GROWTH OF 'GRAN BARCELONA'

## **Post-War Situation**

After the 'grey' period of the Civil War and Franco's victory came a period of poverty and urban chaos. The civil war resulted in a lack of economic resources and political repression. A new economic order was implemented and many production means were physically destroyed which led to a state policy encouraging self-sufficiency, local production, and protection of industries from domestic competitions. In general, the situation was characterized by the immobility of the forties and the chaotic growth of the fifties until the beginning of the seventies (Borja, 2010).

The destructions during the Civil War were not exclusive to Ciutat Vella but they also affected the whole city. Between the rubble of collapsed buildings, piles of earth from the construction of bomb shelters, and the lack of transportation, the city was in ruins.

In 1939, the City Council, under the mandate of the first Francoist Mayor Miquel Mateu, began a 'reconstruction' proposal and, with the collaboration of many laborers, went by removing around 600,000 m<sup>2</sup> of debris. The streets and squares were repaved to facilitate circulation. Some of this debris was used in leveling and continuing the prolongation of Gran Via during the early Francoist years (Fabre, Huertas, 1988).

However, Borja pointed out that it was a period of isolation where the private sector was encouraged and characterized by actually a *"falta de una política de reconstrucción de la ciudad"*, an *"aceptación de la informalidad y de la segregación"*, and a *"negación del espacio público como espacio social y cultural"*<sup>97</sup> (Borja, 2010: 72).

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<sup>97</sup> In the 40s collective activities were prohibited in the streets and squares including celebrations and fiestas. By the beginning of the 50s there was a kind of progressive but slow reclaim of public space for the cultural activities, parties and celebrations for religious reasons. No political activities were allowed except for that of the government's *"único"* party making the public space become *"un asunto del Estado"* (Borja, 2010: 72).

Property owners were responsible of making the necessary reparations of their own property as well as removing the debris of their buildings which was a difficult matter considering the lack of transportation and in finding construction materials. This led the owners to leave the debris on the streets in spite of the penalty fees imposed on them by the City Council.



**Fig. 166** View of Plaça Urquinaona in 1941 (Unknown, 1941. AFB)



**Fig. 167** Inauguration of the new tram in 1944 in Passeig de Colom with general Moscardó and Sr. Correa on left (Pérez de Rozas, 1944. AFB) and on right Franco visiting Passeig de Colom in 1947 (Pérez de Rozas, 1947. AFB)



As for public spaces, some streets suffered from poor conditions and had to be redeveloped or recreated like the redevelopment of Passeig de Colom<sup>98</sup> and its monument that took place between 1940 and 1944, and that of Passeig d'Isabel II, Pla del Palau, and Plaça Antoni López between 1940 and 1943.

Many projects were already being developed or planned before the war erupted and in the forties the works on them were resumed such as, the tunnel between Plaça Universitat and Plaça Catalunya that had remained unfinished for many years until 1940 when it was

<sup>98</sup> The physiognomy given to Passeig de Colom in 1940 will remain until its new redevelopment in 1986 except for the platform along the port that was eliminated in the sixties.

closed to become Avinguda de la Llum (Fabre, Huertas, 1988). In that same year Plaça d'Urquinaona was also remodeled.

Moreover, they worked on the prolongation of Gran Via's both sides towards the Llobregat and the Besòs that was a long process, and on the prolongation of the Diagonal from Pedralbes to Esplugues between 1942 and 1944. They also included among others the urbanization of General Mitre, Via Augusta, and Carrer Balmes between the Diagonal and Plaça Molina which triggered the urbanization of the latter in 1941 and the creation of Plaça Gal·la Plàcidia in 1944. In addition the first urbanization of Plaça Maragall had also begun during the 1940s. As a matter of fact, very few squares and green spaces were created during this decade, which will be discussed further on, with the exception of Parc Monterols (1947).



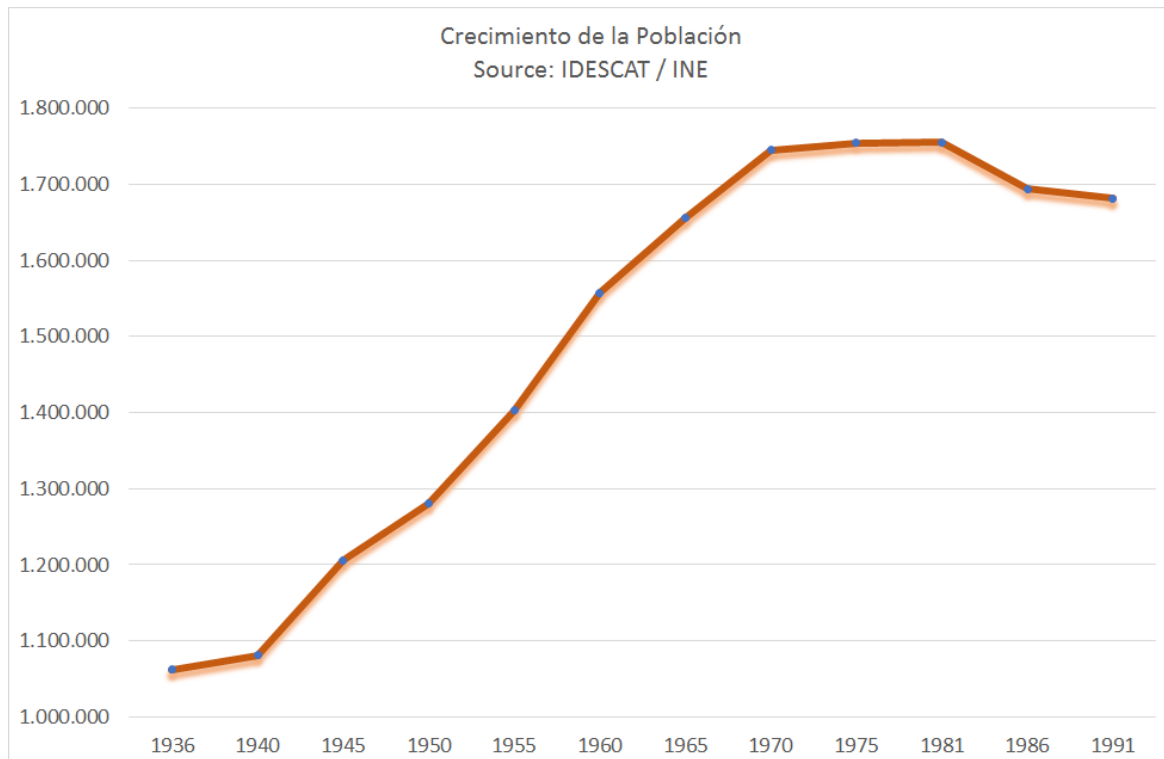
**Fig. 168** Main axes urbanizations of the 1940s (Fabre, Huertas, 1988)

Between 1940 and 1970, Barcelona witnessed massive internal migrations fleeing the tyranny or leaving rural areas to seek opportunities in the city's developing industries coupled with lack of housings. This fact led to a demographic change, oversaturation and insalubrity in the existing residential areas especially in Ciutat Vella and the Eixample that had become totally congested. In addition, it resulted in the construction of immense working class housings centralized in the peripheries, and the creation of slum dwellings or shantytowns –a phenomenon of Franco's regime in Barcelona– that extended across the city. The lack in residential spaces became a serious matter, a problem inherited since the beginning of the century and legitimized with the 'Leyes de casas baratas y económicas' (1911-1922-1924-1935) sanctioned with the intent to accommodate immigrants and



diminish slums (Domingo, Sagarra, 1999; Musons, 1984; Castrillo Romón, 2003; Morales Ramírez, 2015; Tatjer, 2010; Tatjer, 1997, 2003; Remesar, Ríos, 2015).

*“La solución del problema de la vivienda no puede basarse en las simples posibilidades del capital privado, porque este capital sólo se moviliza en busca de un negocio que no puede existir cuando el usuario es una clase económicamente débil. El capital privado no puede construir, a un interés normal, viviendas para esas clases, y por esto el aumento natural de población y la inmigración han tenido que ser absorbidos por una alarmante superpoblación de los suburbios y por la aparición de las barracas”* (Bassó, Buxó, Bohígas, 1953: 2).



**Fig. 169** Graph of increase in population 1936-1991 (CR Polis, IDESCAT, INE)

New codes and plans appeared intending to solve the shortage of housing such as the ‘Regimen de Viviendas Protegidas’ (Protected Housing Act) in 19 April 1939 and the ‘Ley de Viviendas de Clase Media’ (Middle-Class Housing Act) in 25 November 1944. There was a halt in building projects and shortage of construction materials and building models but this did not diminish urban developments.

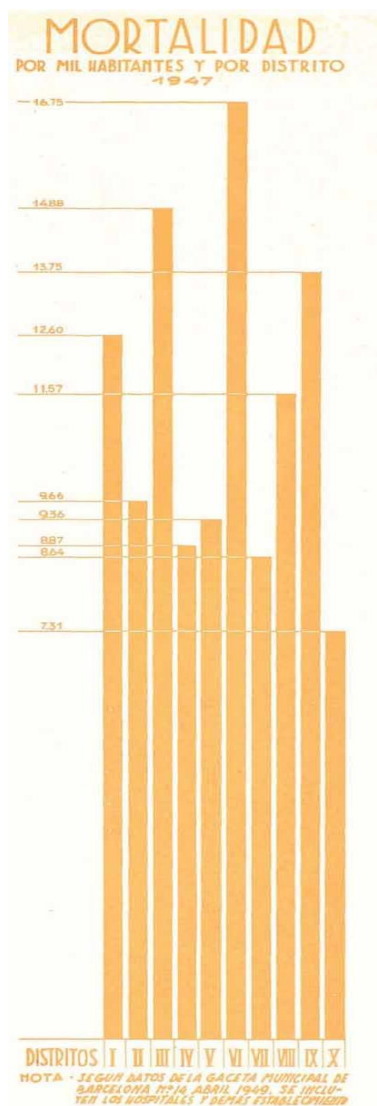
*“Barcelona, en los últimos quince años ha aumentado 350.000 habitantes. Ello obliga a prever la construcción de una media anual de 12.000 viviendas (unas 12.000 en 10 años); el equivalente a la ciudad de Valencia. El déficit actual es de unas 50 a 60 mil. Los*

*realquilados ascienden a cerca de 40.000 familias; otras 9.000 viven en barracas y el resto en viviendas insalubres y ruinosas o en hospedaje.*

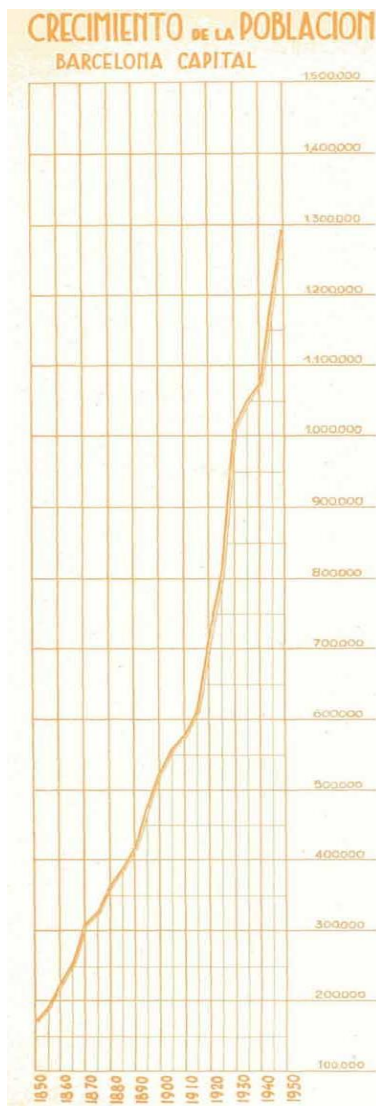
*La construcción de 60.000 viviendas implica un capital aproximado de 7.200 millones. La penuria de viviendas repercute principalmente sobre las masas inmigrantes. El 80% de familias faltas de hogar, procedente de la inmigración. La clase productora sufre principalmente la escasez: de los sin hogar, un 80% son obreros manuales. Se trata, pues, de un objetivo que requiere una acción conjunta. [...] Pero esta disposición (se refiere al Plan de Urgencia Social) impulsa a movilizar, sin excepción, todos los recursos a nuestro alcance. Está en juego la vida de miles de familias y, con ellas, la solidaridad humana y el sentido cristiano de la vida" (Porcioles, 1962: 170-171).*

With the 'I Plan Nacional de Vivendas (I National Housing Plan) (1945-1955) cheap housing estate models started to appear –to compensate for the lack of housings– and marked the beginning of a new housing era, such as Urbanización Meridiana (1945), Torre Llobeta (1950), La Verneda (1950), and El Congrés i els Indians (1953-1968) built as a result of the XXXV Eucharistic Congress, the first international congress held after the war in 1952.

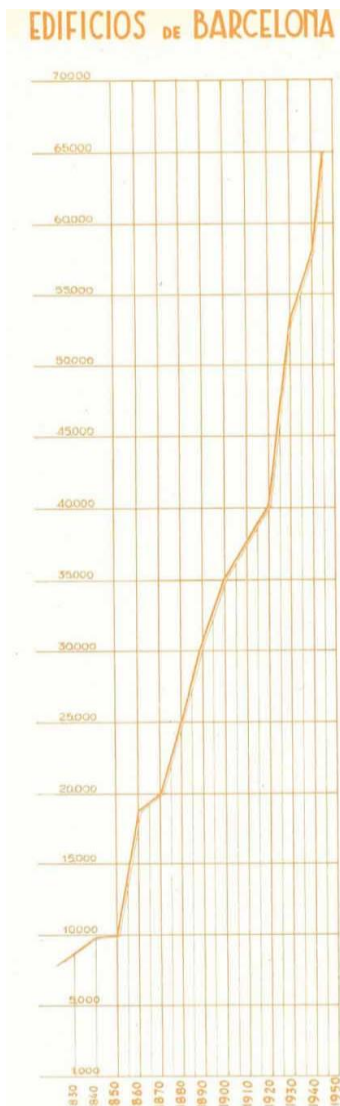
Following the Francoist regime's opening to foreign capital, the country began a period of rapid growth and developments aiming for a 'Greater Barcelona'. By that time Barcelona, governed by the Francoist Mayor Jose M<sup>a</sup> de Porcioles (1957-1973), suffered from marginal urbanization that expanded throughout the districts and municipalities of the region causing disproportionate, disorganized, discontinuous and fragmented growth, self-built districts and poor unhealthy housings: "...extendía un caos de ladrillo y cemento a poblaciones mucho más alejadas que, carentes de norma, se habían desarrollado con escaso sentido urbanístico" (Martorell, Florensa, Martorell, 1970: 122).



**Fig. 170** Graph showing the different mortality rates in the districts of Barcelona in 1947 taken from La Gaceta Municipal de Barcelona, no.14, 04-1949 (Bassó, Buxó, Bohígas, 1953)



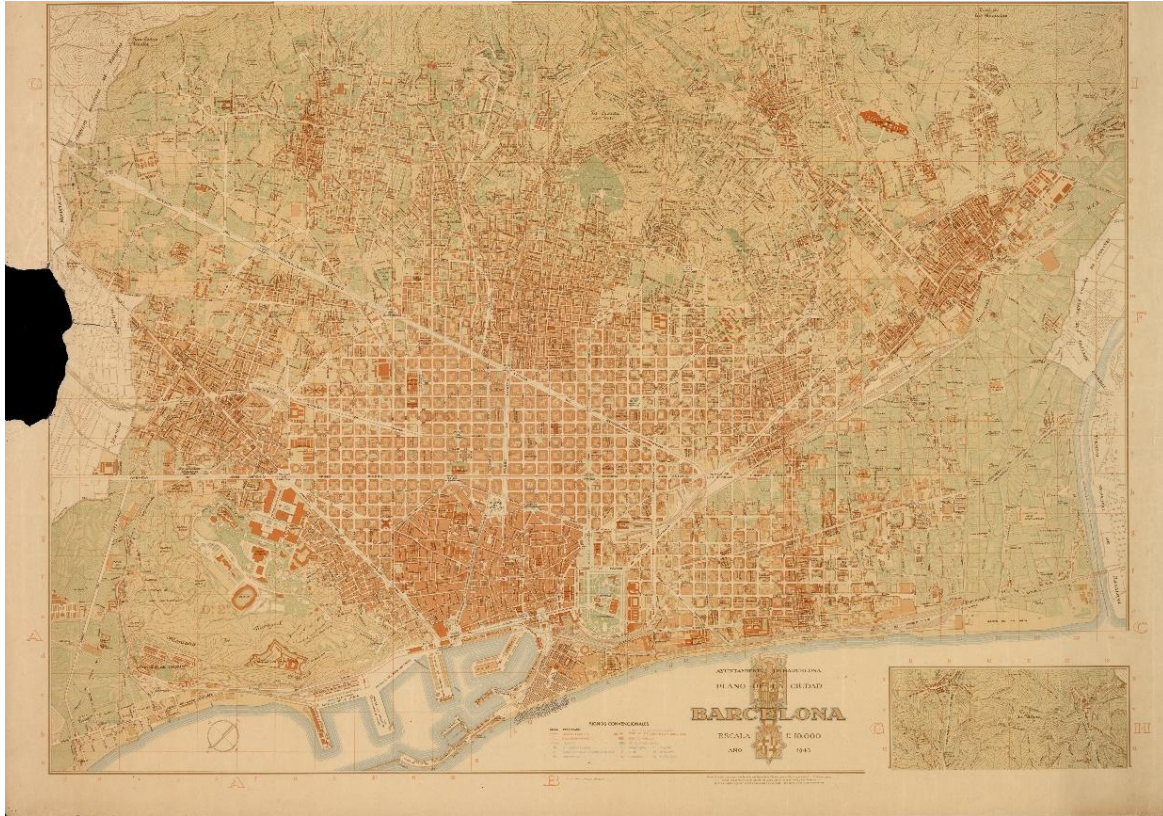
**Fig. 171** Increase in population growth and buildings in the span of a century that kept on increasing beyond the 1950s (Bassó, Buxó, Bohígas, 1953)



Since Cerdà drafted his plan, many plans and projects were drafted with the intent of finding solutions beyond Cerdà Plan, including the plans of Jaussely, Romeu and Porcel, Le Corbusier and the GATCPAC, and the various reform plans of Ciutat Vella, but some were never executed and others only partially (Teixidor, Tarragó, Brau, 1972). Thereupon was the need for another new plan to fix the problems in the main cities and articulate them with their peripheries and surrounding towns.

In Barcelona the 'Comisión Superior de Ordenación Provincial' (Commission of Superior Provincial Planning) was created by the Decree of May 25 1945. Barcelona was not the

only city to create its Commission but in 1942 the 'Comisión de Urbanismo de Toledo' was created; in 1944 that of Guipúzcoa; in 1946 the 'Comisión de Urbanismo de Madrid' was created; in the same year the 'Corporación Administrativa Gran Bilbao' was established; and in 1949 that of Valencia.



**Fig. 172** Plan of Barcelona in 1943. (Llorens, Martorell, Roselló, 1943. AHCB)

The Commission's principle mission was creating the 'Plan General de Ordenación de la Provincia de Barcelona' (Provincial Plan) along with common norms and regulations for all the towns in the province. Due to the urban planning urgency of Barcelona, as well as its near region, the Commission drafted the 'Plan Comarcal de Ordenación Urbana de Barcelona' (Regional Plan) that was actually finished and approved by the Bylaw of December 3 1953 before the Provincial Plan that was not completed until April 15 1963. This Bylaw created at the same time the 'Comisión de Urbanismo de Barcelona' (Commission of Urbanism), – that eventually substituted the Eixample Commission – directed by Vicenç Martorell Otzet, to oversee and manage the plan. The City Council in its turn established the 'Oficina de Estudios de la Comisión Técnica Especial de Urbanismo', directed by Soterias Mauri and Bordoy Alcántara, to execute the plan. As a matter of fact, the plans were first presented in 1950 in an Exposition during the 'Dia Mundial del Urbanismo' (World Urbanism Day) celebration demonstrating the main concerns of Barcelona's urban matters, and showing in graphs and photos the situation of



its roads, connections, pavements and squares (Soteras, 1950). Baldrich supported this by writing:

*“La celebración, por primera vez en España, del Día Mundial del Urbanismo coincidió felizmente con la plena actividad de la Comisión Superior de Ordenación Provincial de Barcelona, lo que permitió dar actualidad y esplendor a la fiesta, mostrando en este día a los barceloneses una parte del material técnico que integrará, en su día, el Plan Provincial”* (Baldrich, 1950: 12).

The Plan consisted in organizing Barcelona and its neighboring municipalities through Partial Plans established within the said Plan. As a matter of fact Florensa and Vilaseca's 'Plan Parcial de Ordenación del Casco Antiguo de Barcelona' (1956-1959) was drafted by that Office and considered one of the Partial Plans of the 1953 Plan Comarcal and developed one of its zones as discussed in the previous chapter.

## **Plan Comarcal**

The Plan Comarcal proposed an urban system by conceiving the city as a 'multinuclear' system and a cluster of neighborhoods or 'unidad vecinal' each one independent of the other with an 'organic' rearrangement (Monclús, 1998); zonification perceived in residential areas, industrial areas and mixed areas; revising the road system and establishing ring roads and beltways; planning the distribution of open and free spaces and reserving land for green areas, agriculture, facilities and equipments<sup>99</sup>.

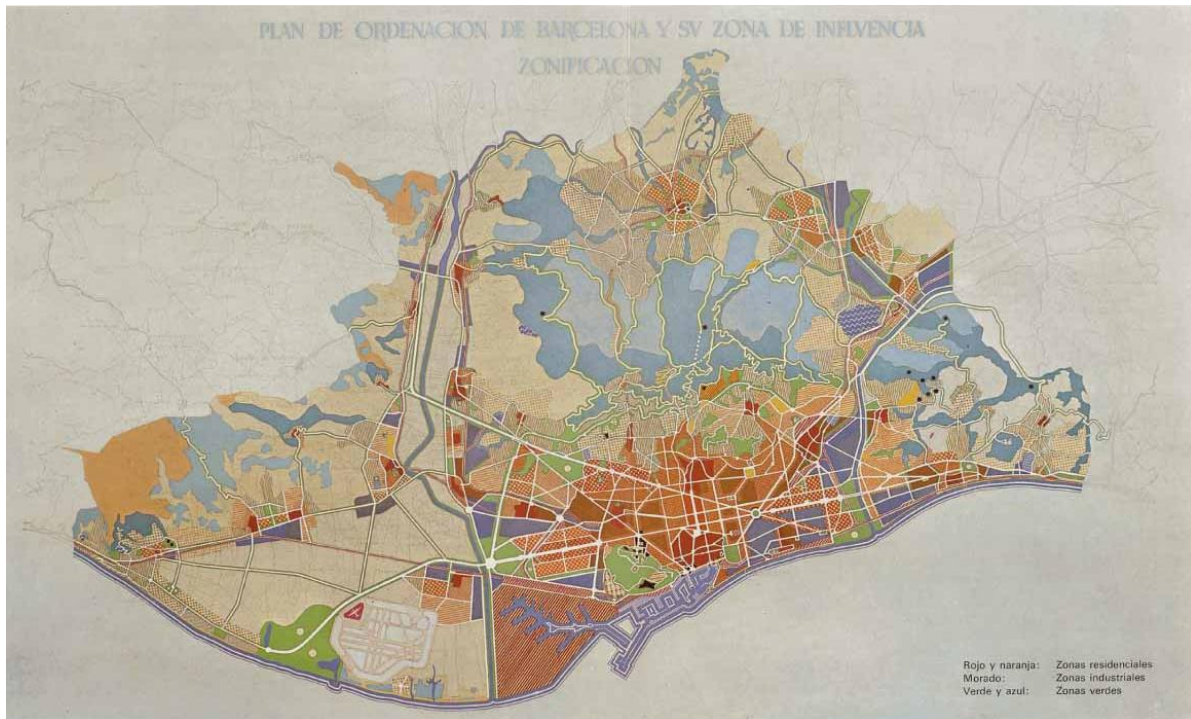
*“Antes se señalaba la alineación y la rasante de una calle; a partir de 1953, se componían barrios enteros, no solo en sus aspectos viarios, sino en las reservas de suelo para parques y para servicios públicos de toda clase, dictándose, además, las condiciones dimensionales y de uso de la edificación”* (Martorell, Florensa, Martorell, 1970: 122)

It was developed through Partial Plans –a total of 51(41 approved and 10 pending) – that have been the main instrument in arranging the urban structure of the city (Teixidor, Tarragó, Brau, 1972).

The partial plans were divided into three types of classifications: that of extension (extending non-built zones and creating new areas) like plan 'Levante-Norte'; that of reform (consisting in remodeling, change in use and qualification, organizing and aligning blocks) like plan Meridiana; and legalization (consisting in legalizing certain typologies or uses that existed before the plan) like 'Els Tres Turrons'. In some cases the partial plans caused a change in zonification and classification of certain areas as in 'Zona de la Bonanova'.

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<sup>99</sup> The development in the suburbs were very extensive and the magazine *Cuadernos de arquitectura* dedicated two numbers in 1965, Suburbios I no.60, and Suburbios II no.61.



**Fig. 173** The Plan Comarcal in 1953 and its zones (Montero Madariaga, 1972)

The Plan Comarcal established a thorough zoning (39 zones) and proposed a physical design of the new territories with regulations and norms based on the Bylaw approved in 3 December 1953. The different zoned territories were classified as residential, industrial, or commercial areas with separation of functions based on the Athens Charters. However, most areas were of mixed use; residential, industrial and public use.

*“El diseño físico responde a los criterios de zonificación con una relativa especialización de ciertas áreas residenciales, Industriales y comerciales, respondiendo a la separación de funciones postulada por el urbanismo racionalista de la Carta de Atenas; no obstante, en la mayoría de zonas dedicadas a residencias, las normas permiten usos industriales y públicos, en gran parte reflejo de situaciones de hecho que el Plan recoge íntegramente”* (Teixidor, Tarragó, Brau, 1972: 71)

In fact, as Capel pointed out it was the ‘Ley de Régimen del Suelo y Ordenación Urbana’ (Land Act) sanctioned on May 12 1956 that regulated the expansion of Spanish cities, and differentiated between the “suelo urbano”, “suelo de reserva urbano” and “suelo rustico” (Capel, 1974: 21). It made a clear distinction between the General Plan and its Partial Plans and allowed land transformation to be carried out by public action or by private initiative through the partial plans themselves. This fact that the private sector, later on, to speculate, change land classification, and increase values to their advantage to obtain higher capital gains. (Montero Madariaga, 1972; Teixidor, Tarragó, Brau, 1972).



From that point onwards, neighborhoods expansion, densification, and the growth in the flow of migrants became steady extending into the outskirts of the city and changing the physical shape of the suburban plain. Between the 50s and mid 70s residential peripheries with incomplete forms and services started to appear, along with slums, mass housing estates without preliminary or partial planning, new suburban districts, and the selling of marginal un-urbanized land at high prices. And not to forget the tourism phenomenon of that period which led to the development of second-housings.

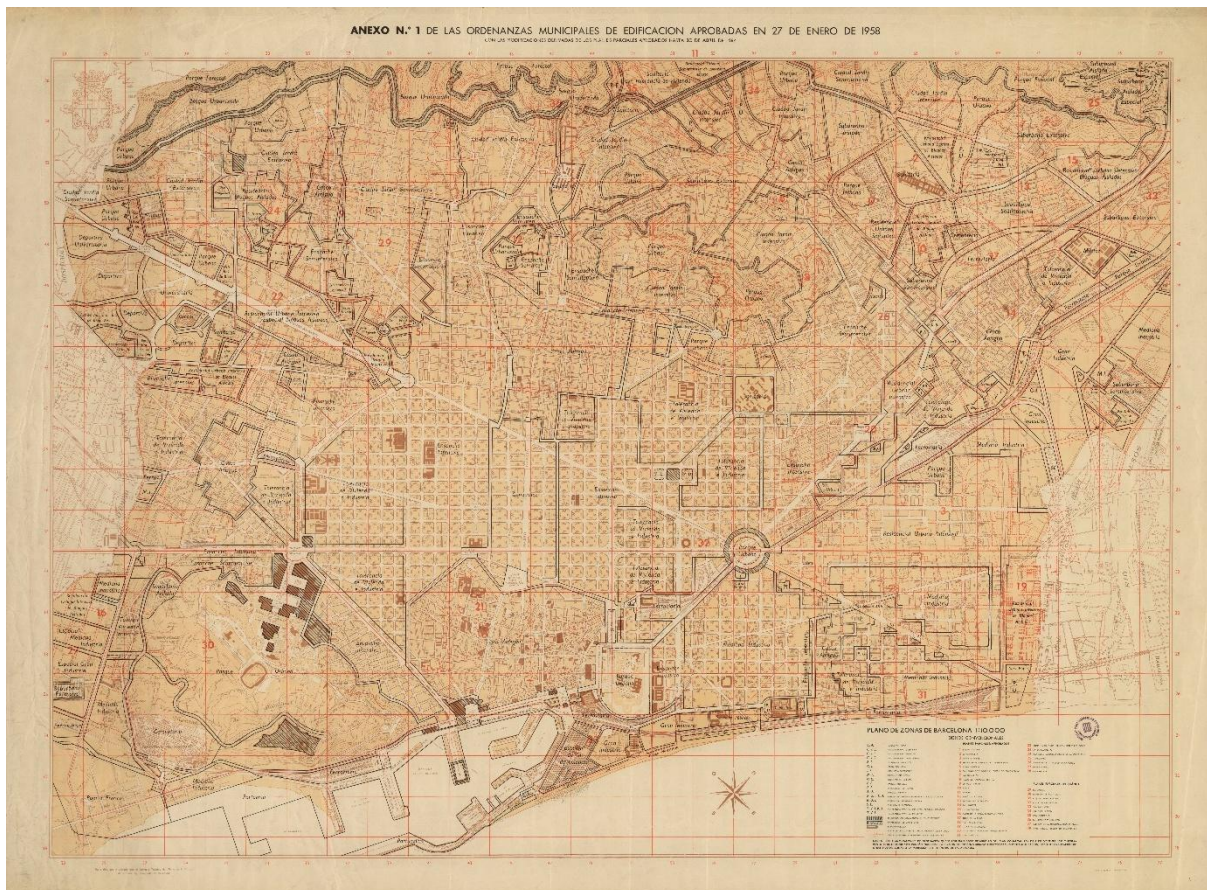


Fig. 174 Zonal divisions of Barcelona in 1958. (1958. ICGC)

The 'Plan de Emergencia Social' (Social Emergency Plan) created in 1958 intended to further solve the residential problems. It implemented major housing programs known as housing estates or 'poligonos de vivienda' promoted to house low-income families, such as, La Guineueta (1955), Montbau (1956), la Pau (1966), Bon Pastor, Baró de Viver<sup>100</sup> (1958-1959), La Trinitat (1952-1954), Bellvitge (1965), Can Serra (1969), San Ildefons (1960), Sant

<sup>100</sup> The first cheap housing or 'casas baratas' settlements in Baró de Viver and Bon Pastor date back to 1929 after the approval of the second 'Ley de Casas Baratas' in 1921 (the first in 1911). And during 1958 and 1959, with the migrant waves, new housing and industrial estates were constructed increasing the sizes of both neighborhoods. For more info on the projects in both neighborhoods check the work of Universitat de Barcelona's research center CR Polis <http://www.ub.edu/escult/>



Martí (1962-1968), among many others. They were housing estates based on the consolidated isolated block with dimensions and expectations much more ambitious than those built before them.

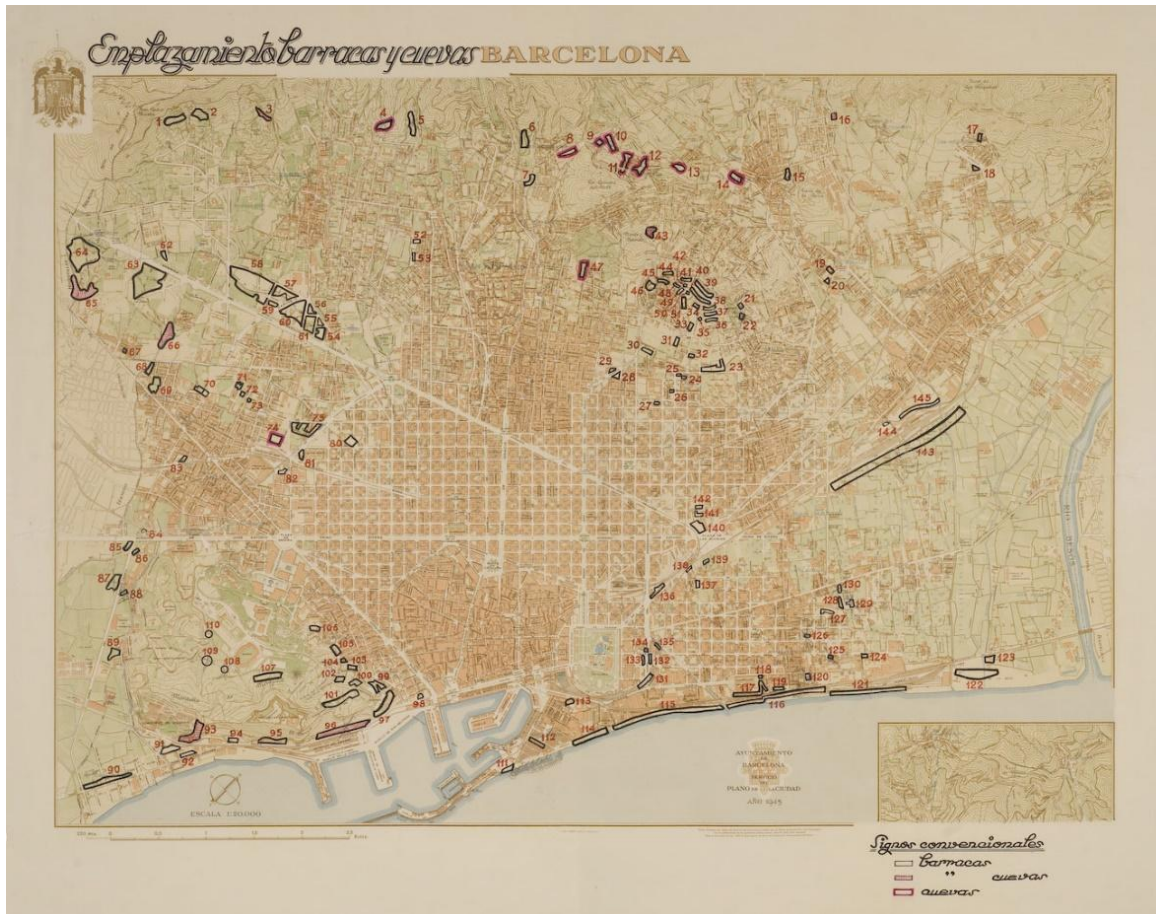


Fig. 175 Plan of Slums and Caves in Barcelona 1949 (1949. AHCB) See (Tatjer, M - Larrea, C 2010)

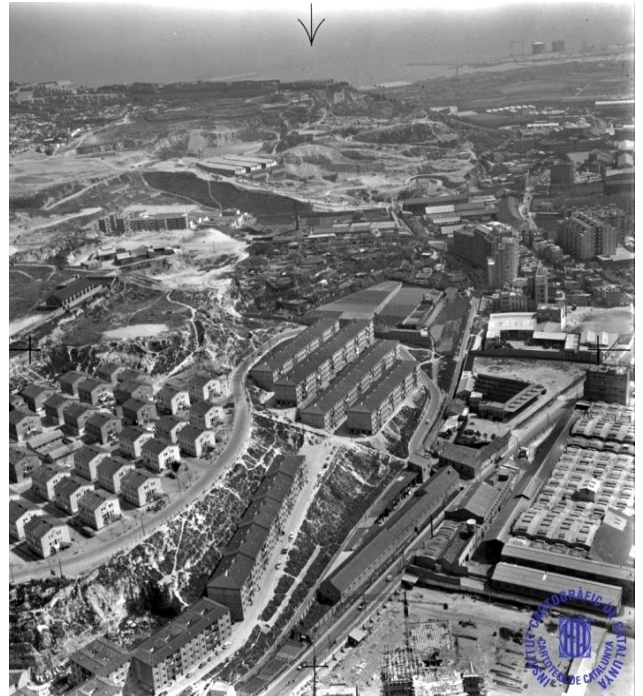
The majority of the urban growth was located in the different peripheral areas surrounding the city. Between 1955 and 1965, housing estates were concentrated mainly in the city of Barcelona, 25,911 compared to 18,205 in the region, whereas between 1965-1972, it was 91,351 in the region versus 9,767 in Barcelona. As for land occupation and usage from the 2,500 hectares of the region's 27 municipalities, about 1000 correspond to suburban expansion; 900 hectares to housing estates, 650 hectares to marginal urbanizations, and 900 hectares occupied by the Eixample, and not to forget the areas of second-housings which are difficult to quantify (Monclús, 1997).

They were often located in isolated settlements, with no relation to any urban nucleus, consolidated and poorly built. *"El fuerte crecimiento demográfico y la no menos intensa inmigración dio lugar a la transformación de las zonas de Ciudad-jardín en zonas de edificación en bloques aislados"* (Martorell, Florensa, Martorell, 1970: 125).





**Fig. 176** New polygons near casas baratas in Bon Pastor c.1965 (1965. ICGC)



**Fig. 177** Monotonous housing estates Zona franca c.1960 (Castella, 1965. ICGC)



**Fig. 178** Dense and unhealthy slums of the Somorrostro on the coastline of Barcelona mixed with the industrial zone of Poble Nou (Fabre, Huertas, 1988)



**Fig. 179** Degraded dwellings in the center with enclosed blocks leaving no possibility for free spaces (Bassó, Buxó, Bohígas, 1953)

Most of the housing estates were built to displace immigrant families living in barracks in the slum areas that according to Bohigas (1963) was an immediate solution for those families. It is true that they have a bigger and solid roof over their heads, but they were moved away from the city to live in newly invented chaotic suburbs, in uncomfortable and ugly accumulations, and badly planned houses, in other words, another slum with an architect's signature:

*"En el suburbio de la disbauxa les coses comencen, com sempre, amb una simple especulació. Apareix sovint una estranya immobiliària, a vegades hipòcritament benèfica, que ven terrenys a pagues. La família que ha superat la fase purament barraquista dedica nits i diumenges a fer la pròpia casa [...] A última hora, la família, adelerada, haurà de buscar un arquitecte perquè li "firmi" [...] uns plans qualssevol per a poder obtenir la "cèdula d'habitabilitat" i aconseguir les preses de corrent d'aigua o d'electricitat. [...] I la casa, un cop acabada, serà ben poc diferent de l'antiga barraca incontrolada [...] Però, de segur, serà encara més trista, posada enmig d'una acumulació més incòmoda, més bruta i més lletja. Així, anem creant suburbis sencers i ciutats senceres, [like] tots els suburbis de Barcelona des de Santa Coloma de Gramenet fins a l'Hospitalet de Llobregat. [...] Ha nascut un monstre nou: el barraquisme amb firma d'arquitecte. Però, de segur, serà encara més trista, posada enmig d'una acumulació més incòmoda, més bruta i més lletja"* (Bohigas, 1963: 150, 151).



Fig. 180 Map of the housing estates and casas baratas (CR Polis)

In addition and as a result of this growth and decentralization, industrial estates or 'poligonos industriales' started to appear –and intensified in the 60s– in the peripheries or

marginal areas many of them mixed with residential zones like the industrial zone of San Feliu de Llobregat, or the mixed zones of Zona Franca, and the one that separates Bon Pastor from Baró de Viver on Besòs river.

*“Las progresivas obras de urbanización del Eixample Cerdá consolidan los puntos de unión con los primeros núcleos urbanos del llano barcelonés y dejan una serie de vacíos que se llenan en parte con polígonos de viviendas. Por otro lado, a la vez que se observa un crecimiento de las zonas periféricas de Barcelona, se inicia una nueva expansión industrial en una corona de poblaciones más lejanas (Badalona, Sant Adrià, L’Hospitalet de Llobregat, Cornellà), que reproducen los crecimientos suburbanos y marginales de los años anteriores en Barcelona” (Ferrer, 1996: 67).*

As a matter of fact, while the Francoist regime was shaping its urban development and management, in parallel, many prominent housing reflections and projects were rising inducted and motivated by the COACB’s 1949 housing competition<sup>101</sup> (Bassó, Buxó, Bohigas, 1953) –that sought to find solutions for the housing problems–, and the new generation of architects like the Grup R that was the platform for renovation throughout that decade. Created in 1951, the group was formed by Oriol Bohigas, Josep Martorell, Josep Antoni Coderch, Josep Maria Sostres, Antoni de Moragas, Manuel Ribas i Piera, among others. Reconnecting with the works of the GATCPAC and Modernism, the group promoted several events and expositions, organized multidisciplinary meetings, and created prominent projects with the intent to compensate the housing problems of those decades (Bestué, 2011). Despite the cultural isolation, they had an interest in the architectural scene happening abroad endorsed with the COACB’s *Cuadernos de Arquitectura* and its publications of different architectural projects from the international scope including Sert’s publications from the United States.

Even after the Grup R’s dissolution in 1961, its members carried on their work throughout the 60s and 70s reflected through the posterior works of the so-called Escuela de Barcelona (Barcelona School) and the ‘realist’ architects Oriol Bohigas, Josep Martorell, and David Mackay’s architecture team MBM<sup>102</sup> as well as many other groups<sup>103</sup>.

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<sup>101</sup> Francesc Bassó Birulès, J.M. Buxó and Oriol Bohigas published in *Cuadernos de Arquitectura* no.15/16 in 1953, a detailed study and analysis of the housing situation, overpopulation and hygiene, as well as details of the C.O.A.C.B.’s (Colegio Oficial de Arquitectos de Cataluña y Baleares) housing competition’s different proposals entitled “El problema de la vivienda”.

<sup>102</sup> Several texts and articles were published about the Barcelona School’s architects and the MBM team including the *Zodiac*’s issue no.15 in 1965 featuring articles from Ricardo Bofill, Oriol Bohigas, Joan Antoni Solans, Manuel Ribas i Piera, etc. Also Ingansi de Solà-Morales’s article published in 1980 in *Eclecticismo y vanguardia* entitled “La Segunda modernización de la arquitectura catalana”; and Helio Piñón’s *Arquitecturas catalanas* in 1977. The team conducted many emblematic interventions as well as projects of low-cost dwellings between party walls. They used common techniques, materials, and layouts all within the ‘realism’ style that committed to the city’s cultural, social, economic, and political context manifested in Bohigas’s article “Cap a una Arquitectura Realista” (Towards a Realist Architecture) published in Serra d’Or in 1962 and that went in line with the Italian neorealism (which later on will find echo in Kenneth Frampton’s Critical Regionalism).



As for infrastructures and road systems, along with the 'Plan de Estabilización' (1957-1959), the investments in infrastructure increased giving priority to the construction of innovative public communication like the train and Metro, and in major circulation roads like Avinguda Meridiana, Gran Via, Carrer Guipúzcoa, the coverage of Carrer Aragó, urbanization of various streets like Avinguda Roma, Carrer Urgell and Casanova, the two ends of the Diagonal including Plaça de les Glories, and the Passeig Marítim, among others. It was a time where vehicles became dominant in the city especially after the construction of the I and II Cinturón de Ronda (First and Second Ring Roads). Fleet vehicles, called by some the "*milagro español*" passed from 240,460 vehicle in 1960 to 4,392,214 in 1970 (Brau, 1973: 60).



**Fig. 181** The housing estates of Sant Martí and La Pau and the new urban concepts of public and free spaces between the blocks of Sant Martí housing estate (Martorell, Florensa, Martorell, 1970)

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<sup>103</sup> Many teams and groups of architects emerged from the Barcelona School including the Studio PER with Tusquets, Bonet, Clotet, and Cirici; Bach and Mora; Garcés and Soria; E. Torres and J.A. Martínez-Lapeña; Piñon and Viaplana; Sabater, Doménech, Puig, and Santmartí; E. Borrell and F. Rius, among others.



The I Cinturón (Ronda del Mig) was first proposed by Jaussely in his Interconnection Plan, and resumed in 1917 by architects Romeu and Porcel but it didn't reappear until after the approval of the Plan Comarcal. It began in opening up the city with section A between Plaça Cerdà and Plaça Lesseps in November 1969, section B between Plaça Lesseps and Sant Quintin in 12 November 1970, and section C between Sant Quintin and Avenida Jose Antonia (nowadays Gran Via de les Corts Catalans) in 30 November 1972 (Brau, 1973). The works on the II Cinturón (Ronda Litoral and Ronda de Dalt) also began during this period and it completely encircled the city and parts of its metropolitan area before being inaugurated in the 80s.

Later on, several tunnels were proposed such as the tunnel that passed through Tibidabo and connected Sant Cugat to Barcelona and another III Cinturón that went around Tibidabo connecting the Llobregat with La Conreria. These projects were part of the Plan Comarcal's Partial Plans that were incorporated in 1962 within the 'Red de Metros' and 'Red Arterial M.O.P.' (Teixidor, Tarragó, Brau, 1972).

The Plan Comarcal foresaw the development of green areas as well as installations, facilities and equipments, of large-scale, mostly, but also of smaller ones on the scale of the neighborhood proposed by the Partial Plans.

The zonification of the Plan arranged green free spaces into 'Urban Park', 'Sport Zone', 'Recreation Zone', 'Forest Park', 'Forests', 'Protected Landscapes', and 'Private Green Zones'. They could be installations of public and private use except in the case of urban parks and forests. The free spaces destined for parks and green areas were also introduced as a mechanism to delimit and structure the built areas in the region as well as in "*zona de influencia*" of Barcelona, and link them through "*cuñas verdes*" or "green wedges" (Monclús, 1997: 88).

Among the partial plans of Barcelona city, the Plan anticipated the expansion of two of its largest sectors on both of the city's extremities on either sides of the Diagonal, 'Zona Norte' and 'Zona Levante', and they took different forms of growth and development than the partial plan of the old town. The Diagonal sector on the west side i.e 'Zona Norte' was composed of several partial plans among them, 'Zona Norte Diagonal y Las Corts', 'Sector Final', 'Pedralbes', and 'Sol de Baix', which gave way to many high-standard housing estates, roads, urban parks, sanitary areas, green and sports equipments, hotels, hospitals, and towers including the Parc Cervantes, Camp del Barça, Zona Universitaria, Maternitat, and Trade and La Caixa towers.

And the other extreme, 'Zona Levante', was composed of 'Levante-Norte', 'Levante-Sur', and 'Sudoeste del Besos', among others, which gave way to new working-class neighborhoods, public housing and industrial estates including La Verneda, Sant Martí and Poblenou, and new building blocks like Construcciones Horizontales and Cooperativa del Sagrat Cor, to name a few.

The partial plan 'Levante-Sur' covered the city's biggest area of 302 hectares; the second in importance was the 'Zona Norte Diagonal y Las Corts' of 271 hectares; then the 'Sector

Final' of the Diagonal of 237 hectares; the 'Levante-Norte' of 225 hectares; and finally that of Ciutat Vella of 250 hectares.

### Cerdà's Centennial

In the decades of the 50s and 60s, conferences, events and expositions concerning the problems of modern cities played an important role in Barcelona's urban planning, as mentioned before, from the World Urbanism Day held every November 8, to the XXXV Eucharist Congress in 1952. In the aftermaths of the extensive urban growth in Barcelona and its region, concerns and dissemination of the urban situation was accentuated in 1959. That year celebrated Cerdà's Centennial Exposition entitled 'Barcelona 1859' held in the Saló del Tinell that coincided with the World Urbanism Day and the 1st National Congress of Urbanism under the theme 'La Gestión Urbanísticas' (Urban Management). The Centennial was a perfect occasion to revive Cerdà's Plan and organize an international debate on the city, and the Congress was an excuse to display the new urban proposals. Both events were an excuse to organize an international debate on the city, display the regime's new urban proposals, and gather in Barcelona a series of outstanding architects and urban planners from the most important cities of Europe. The Centennial was a perfect occasion to revive Cerdà's work and praise his Plan for Barcelona: *"Plantearse el centenario del pla Cerdà significaba plantearse, desde el pasado, el future de Barcelona. Desde ópticas distintas, con propósitos todavía oscuros, se va a hablar –y mucho más que nunca– de Cerdà"* (Roca, 1974: 51).

The event featured the inauguration of Plaça Cerdà<sup>104</sup> strategically placed in Barcelona's urban fabric, and included a monument, 'A Ildefons Cerdà', that has a complicated and dark history as pointed out by Remesar. The monument designed by Antoni Maria Riera Clivillé received harsh criticism and by 1971 it disappeared after the square underwent changes to make way for the I Cinturón. Remesar added that it was *"the only memory that Barcelona has dedicated to the creator of its eixample and founder of modern urban planning"*.

A century had passed before the language concerning Cerdà had changed and his Plan emerged from oblivion, as Busquets (1992) commented, and the interest in it since then was ever growing and its author becoming a pioneer in modern town planning.

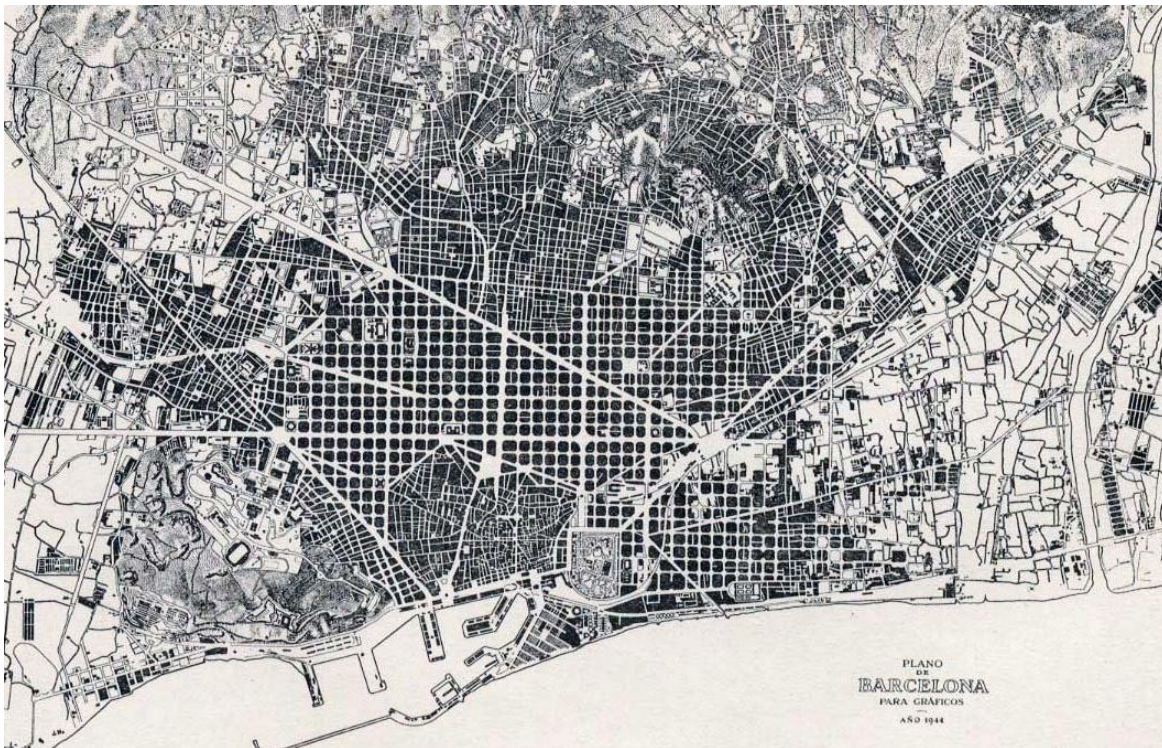
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<sup>104</sup> A Ildefons Cerdà: Remesar discusses the square and monument's history and difficulties that dated back to 1884. Since it disappeared in 1971 *"the demand for a monument to this figure of the urban history of Barcelona has been steady, but without success This does not apply to what could be called a "Cerdà memorial" that started with the publication of the book that includes the 1959 lectures and was continued through the work of Alexandre Cirici and Oriol Bohigas, who facilitated the "Italian Connection". This link, which has existed for many years between Barcelona and Italian architects, was successful in achieving international recognition of Cerdà thanks to the work of Aldo Rossi (The Architecture of the City, 1968), the magnificent contribution of Fabià Estapé in his compilation and reprint of the General Theory of Urban Development, and finally, the systematic work of the Urban Planning Laboratory at the Polytechnic University of Catalonia: without forgetting the recovering of Cerdà's mortal remains which now lie at Montjuïc"* (Remesar, 2004. Artpúblic).

See also the Master final project of Maria Pose Méndez *"Barcelona, 1959. La Ciudad del Futuro"* (2012) in which the Plaça Cerdà and the monument are studied and analyzed based on their history and construction.

*"A first claim for the recognition and systematization of Cerdà's work"* (Remesar, 2004) was expressed in a series of commemorative talks and texts by *"influential specialists in Barcelona planning"* like for example Soterias (1960), Florensa (1959) including the City Council's book especially published for the centennial *Ildefons Cerdà. El hombre y su obra* edited by Florensa holding texts by Martorell, Bordoy Alcantarà, and Durán i Sanpere. Martorell compared the Eixample layout with the official plan of 1859 that were noticeably different. He stated that the proposals and modifications of the current plan should be based on positive and objective improvements unlike the criticism and personal interests of the likes of Puig i Cadafalch:

*"Si comparamos el trazado del plano oficial de 1859, con el actual de Barcelona [...] de momento nos producirá la impresión de que la ciudad se ha desarrollado según el proyecto concebido hace noventa años; no obstante, al descender al detalle, podrán observarse notable diferencias. Es natural que una concepción de importancia extraordinaria a implantar durante el transcurso de largos años, deba ser modificada as surgir necesidades no previsibles o como consecuencia de progresos insospechados, bien entendido que dichas modificaciones deben significar la introducción de mejoras de carácter general y no cambios con tendencia a favorecer los egoísmos particulares e intereses personales a que alude la crítica de Puig y Cadafalch"* (Martorell, 1959: 31).



**Fig. 182** Barcelona and the Eixample in 1950 (Martorell, 1959)

However, despite the awareness and the intents of improvements the Eixample was left with totally built blocks, a lack of open spaces, and almost the total construction of the

interior courtyards. Except in a few cases like Gaudi's Sagrada Familia and the square-gardens facing its two entrances that each occupied one whole blocks (which shows Cerdà's special treatment of religious buildings).

The land speculation since the 50s had spoiled certain important features of the plan throughout its implementation and it has been subject to further congestion and densification. The permitted height of the blocks was increased to 24.40 meters and the height of buildings in the interior patios of the blocks was increased from 1 storey building to 5.5 meters, and construction in ziggurat form was allowed (Busquets, 1992). The results were catastrophic since the blocks' volume increased from 67,200m<sup>3</sup> as depicted by Cerdà to 294,771,61m<sup>3</sup> (Bohigas, 1963).

Bordoy Alcantarà (1959) compared and established the percentages of the surface composition of an urban unit of Plan Cerdà, the actual Eixample, and a recently approved housing estate in the Diagonal. His graph shows a comparison in the percentages of land occupation, roads and green spaces. The percentage of land occupation is substantially equal in both the Plan Cerdà and the housing estate, while the percentage of roads is higher in the former and that of green spaces is higher in the latter. Where as in the actual Eixample there is an excessive percentage of roads and the green spaces almost inexistent absorbed by the constructions, the increase in building volume, and the excessive density and overpopulation.

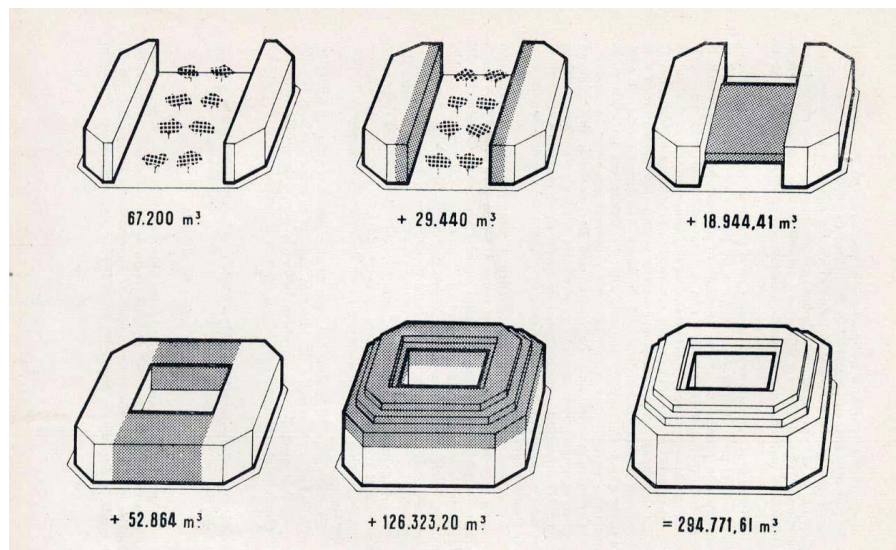


Fig. 183 The densification and congestion of the Eixample (Bordoy Alcantarà, 1959)



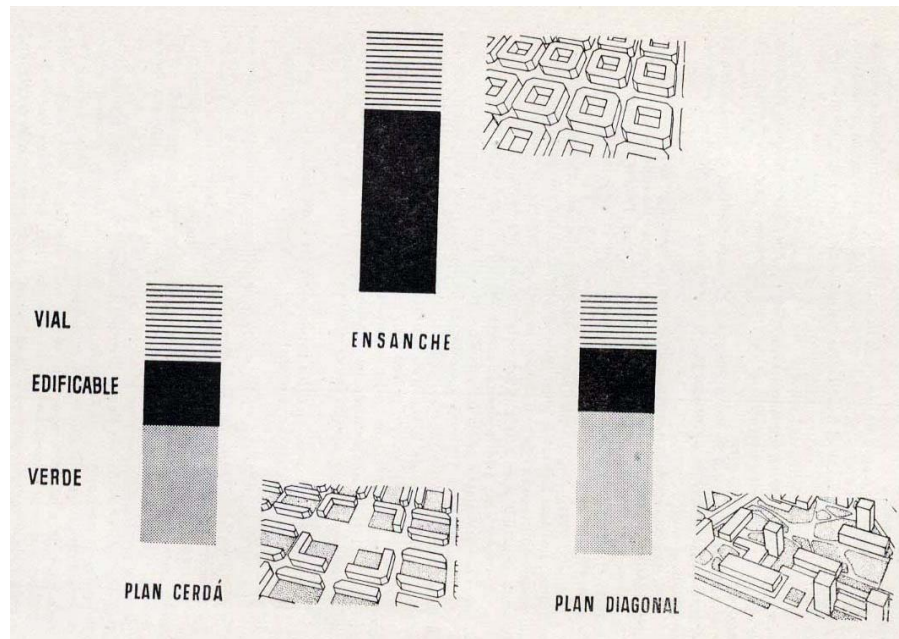


Fig. 184 Graph of Bordoy Alcantarà comparing the percentages of land occupation, roads, and green spaces in Plan Cerdà, Eixample, and a housing estate (Bordoy Alcantarà, 1959).

Bohigas, in his text on the centennial wrote that it is urgent and necessary to look back to Cerdà's plan. He pointed out that the new linear blocks built on large green areas have become slums on mountains of mud and dust whereas monotonous streets of the Eixample have become more authentic:

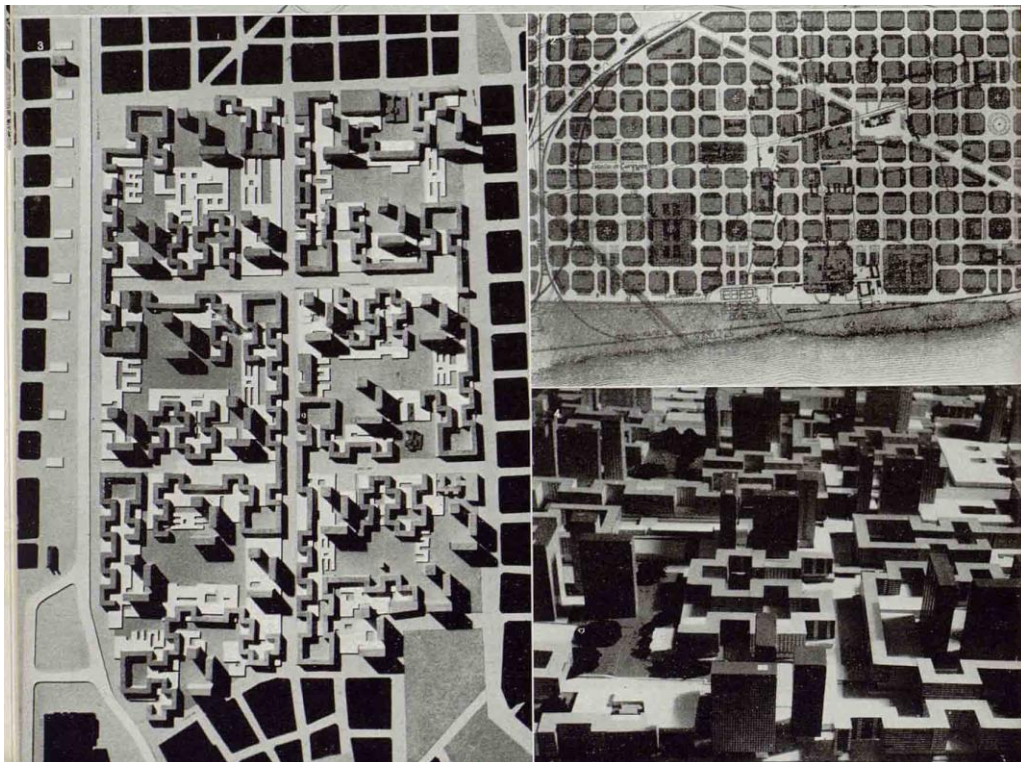
*"Estamos intentando encauzar el país por unos nuevos conceptos urbanísticos y todos tememos el fracaso de lo formalista, de lo inadaptado y hasta de lo frívolo. Estamos, además, alarmados por las primeras y tímidas realizaciones. Los utópicos bloques lineales sobre grandes prados verdes, nos han salido como unos abigarrados tugurios sobre montañas de barro y de polvo. Mientras tanto, las calles de Lauria o de Gerona, las de Sants o las de Gràcia, con sus vituperados pavimentos grises con sus monótonas hileras de plátanos, con sus tranvías, con sus comercios alineados, empiezan a parecernos menos indignas, quizás más auténticamente ciudadanas"* (Bohigas, 1958: (469)7).

Bohigas also discussed Bonet's (1958) new study of the possible evolution of Plan Cerdà by grouping 9 blocks, 400x400 meters, describing his proposal as intelligent, logical, and viable compared to the bad situation of the current blocks on all aspects; hygiene, social, and human. He urged the analysis of Cerdà's plan and the search for urban formulas adequate for the city and its economic and social factors:

*"Por todo ello, urge buscar formulas urbanísticas mas de acuerdo con la tradición de la ciudad y con los factores económico-sociales de su población. Urge analizar el primer Cerdà, como proclamaba sagazmente Bonet, y adaptarlo a la evolución del moderno urbanismo, recogiendo las enseñanzas no sólo de los mismos fallos del plan, sino de los resueltos a que ha llegado su propia degeneración"* (Bohigas, 1958: (474)12-(475)13).

Martorell concluded that:

*“Un hecho ha determinado la elección del tema: que, como Jefe, durante muchos años, de los Servicios técnicos municipales encargados de informar respecto los proyectos antiguos y vigentes de urbanización, pude apreciar que por el público en general, por buen numero de arquitectos e ingenieros y por algunos publicistas, se atribuye a Cerdà no solo lo bueno sino también todo lo malo que nuestro Ensanche contiene. Por tal circunstancia, sobre rectificar verbalmente a los equivocados las veces que tuve ocasión, me prometí aprovechar cualquier oportunidad para ser uno más a demostrar, por escrito, cuanto más bella y más sana fuera Barcelona de haberse “ensanchado” con fidelidad al diseño del genial ingeniero. Me complace cumplir la autopromesa” (Martorell, 1958: 40).*



**Fig. 185** Bonet's proposal for the Plan Cerdà and his maquete for Buenos Aires (Bohigas, 1958).

### Deficits and Consequences of the Plan Comarcal

The Plan Comarcal analyzed the main aspects of planning: zoning, communications, housing and industry, free spaces and public spaces, and sanitation (Teixidor, Tarragó, Brau, 1972). It was a coherent plan in relation to itself and the rest of the city but during its application and realization the outcome was different: fragmentations, imbalances, contrasts and discrepancies were produced.

It was based on excessively ambitious assumptions and unrealistic approaches in the economic, political and administrative circumstances. It lacked an adequate management that resulted in an incoherent uncontrollable urban growth and invasion of the suburban areas, and further densification of the more consolidated areas. The delimitation of land reserves and the qualification of areas of “*extensive*” housings served to legalize land speculation that boomed in the late 50s (Monclús, 1997: 88).

*“Una primera conclusión sobre la realidad, ¡triste realidad!, de la gran mayoría de los Planes Generales, es la de que se han transformado en puros documentos de trámite, ya que no en auténticos instrumentos para el desarrollo urbano, y que han sido promovidos, desde para abordar formalmente una problemática urbanística urgente, hasta para encubrir acciones extra-planeamiento promovidas por agentes privados e incluso públicos; las propias incoherencias, unidas a la inexistencia, en general, de planificación de orden superior, ya sea económica y social, como física, hace que estos planes se produzcan como hechos aislados ajenos a unas realidades urbanísticas regionales o comarcales insoslayables”* (Montero Madariaga, 1972: 12).

The Plan Comarcal suffered from deficits and discrepancies due to several factors including the Partial Plans.

The situation of the Plan Comarcal could be analyzed through its Partial Plans, “*su uso, y...su abuso*” (Montero Madariaga, 1972: 12), that further demonstrated the deviation between what the plan foresaw and reality<sup>105</sup>. The Plan faced a number of disequilibrium on different levels:

1. On the Regional level: Barcelona city had a higher number of partial plans than the rest of the region showing a monopolar structure and inconsistent depersonalized suburbs of the Great City (Barcelona).
2. On the sector level: the private initiative played a role in the change of land use and value to their own advantage.
3. On the municipal level: To compensate for the disequilibrium municipalities balanced their different activities independently of the different functions assigned to them by the Plan.

This caused further disequilibrium, densification, increase in housing areas, and a qualitative change in land usage. Areas originally planned as residential zones were replaced by industrial zones, and land destined for free spaces, facilities, or agriculture got occupied by industrial and residential zones:

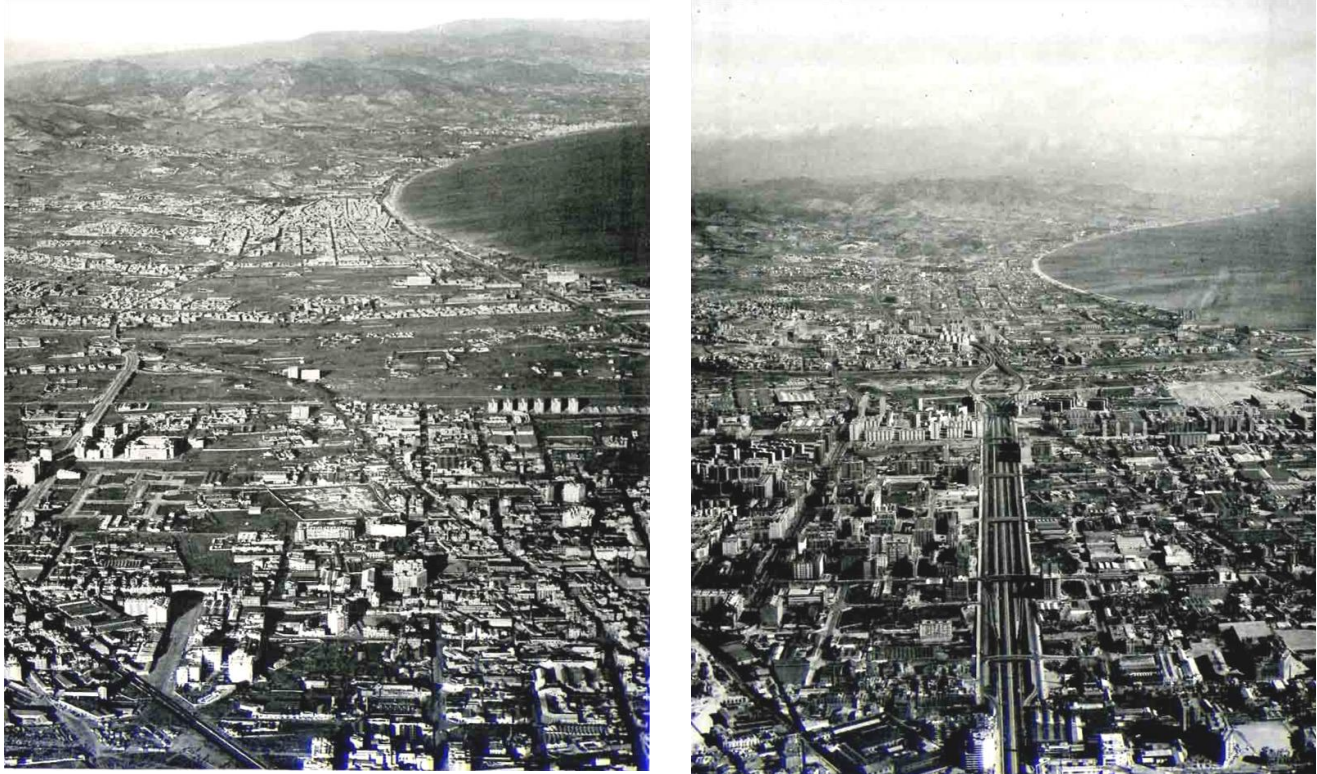
*“En efecto, un estudio estadístico nos demostraría cómo los diferentes municipios integrantes del área comarcal han dedicado sus esfuerzos a intentar equilibrar las distintas actividades en su término municipal, con independencia de las distintas funciones que les asignaba el Plan. En este sentido son de destacar los esfuerzos dirigidos a la implantación*

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<sup>105</sup> For further readings on comparisons, contrasts, and analysis of the Plan Comarcal and its Partial Plans can be found in the articles of Teixidor, Tarragó and Brau “Barcelona 1953-1971: introducción a una nueva visión del desarrollo urbanístico”, and Montero Madariaga “El planeamiento parcial en la comarca de Barcelona” in VV.AA. “El Área Metropolitana de Barcelona” both in *Cuadernos de arquitectura y urbanismo*, no.87, 1972.



*de zonas industriales, en municipios previstos por el planeamiento como residenciales, y, en general, a un aumento de la densidad y en la edificación destinada a vivienda. [...] el aumento en las previsiones de zonas industriales se ha realizado a través de la ocupación del suelo destinado a equipamientos y dotaciones [60%], mientras que las zonas rusticas y agrícolas se transformaban, en su mayoría, mediante su incorporación a zonas residenciales de baja densidad (ciudad-jardín)” (Montero Madariaga, 1972: 13).*



**Fig. 186** Sector of Sant Martí in 1959 versus the same sector in 1970 with the Mataró highway. The city had become more decongested and segregated by rectilinear infrastructure dividing neighborhoods in urban shape and social form. (Martorell, Florensa, Martorell, 1970)

Fabre and Huertas argued that it was a time of extensive urban growth and developments but also “[...] *sobretot, la crónica d’una llista interminable de transgressions, de barbaritats, de victories de l’especulació i de perdues irremeiables*” (Fabre, Huerta, 1988: 342) that resulted in isolated shanty towns and poorly built housing estates with densities higher than 70 apartments per acre which generated urban conflicts.

In their part, the new projects of infrastructure, in particular the railways and the I and II Cinturón, with their rectilinear forms cut through and around the city taking everything in their way. In other words, they represented a modern day ‘eventrement’.

These vias gave priority to high-velocity vehicles in the form of highways, beltways, roundabouts, junctions, bridges, tunnels, and underground pedestrian crossings regardless of their effect on the urban fabric. They caused high levels of expropriation and demolitions across many neighborhoods resulting in social, urban, and environmental



problems. Brau described them as expensive physical barriers disrupting and defragmenting neighborhoods:

*“Los efectos de barrera física del Cinturón suponen, aparte la trituración física de la trama edificada, el rompimiento del barrio como unidad social. Fuerte aumento de viajes internos, pues lo que antes suponía simplemente atravesar una calle puede en la actualidad significar un rodeo de uno o dos kilómetros. Posiblemente el gran incremento de tráfico que sufrirán las áreas vecinas al Cinturón supondrán uno de los costes sociales más caros. El efecto degradante del coche, con sus inmediatas consecuencias de congestión, contaminación, ruidos, olores y accidentes de tráfico supondrán una deteriorización ambiental aún más rápida que en la actualidad” (Brau, 1973: 60).*



Fig. 187 The Meridiana separating and seggrating Sant Martí (1962. ICGC)

### **The situation of open spaces and small public spaces**

This rupture in equilibrium caused an important reduction in free spaces especially the ones reserved for green zones, facilities and equipments. The municipal government of Porcioles did not acquire a well defined policy or program for urban parks and public spaces. Clearly they were not considered a priority but rather an excuse in the face of the increased densities in certain areas of the city. Investments and purchases of land plots designated for parks and squares were minimal. Many were lost due to change in land

qualification and use, displaced to marginal sectors, or their delayed construction remained pending as Teixidor, Tarragó, and Brau (1972) affirmed. On one hand, there was a 12% increase in residential zones, and 53% in industrial zones. On the other hand, a 43% decrease in zones anticipated for free spaces like Urban



Fig. 188 Green public spaces according to the 1953 Plan Comarcal (Torres i Capel, 1999)

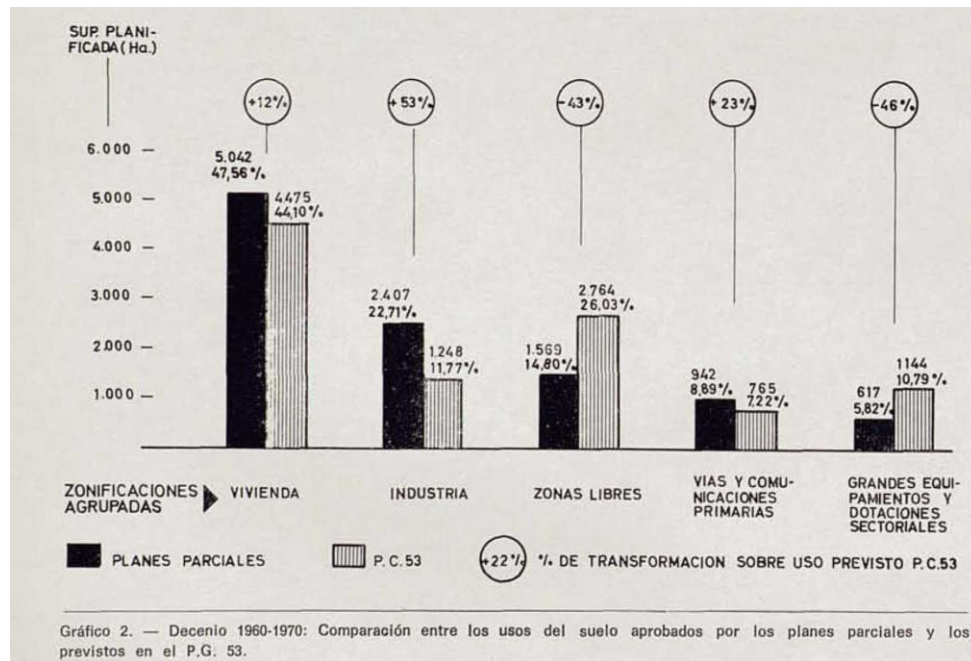
Parks, rural and agricultural spaces, and Forest Parks, and a 46% decrease in Sports and Recreation Zones destined for large equipments and endowments like sports areas, cultural centers, schools, among others.

*“Así, en el caso de Barcelona, las densidades potenciales de población se multiplican por 1.8, mientras que las zonas libres (parque urbano, rural, agrícola, bosque y parque forestal) se reducen de 2.764 has a 1.569 has, es decir, un 43% en relación a las previstas por el Plan General 17. [...]Y que las previsiones de espacios libres en el Plan general habían sido realmente importantes a pesar del mencionado recorte posterior” (Monclús, 1997: 88).*

Montero Madariaga stated that in the 60s and 70s only 9.73% of the planned area had been classified as Urban Park<sup>106</sup>, not even reaching the debatable 10% pushed by the Land Bylaw as the minimum legal obligation to be complied by the Partial Plans:

<sup>106</sup> The Plan Comarcal foresaw the development of free spaces (green areas as well as facilities and equipments) arranged into ‘Urban Park’, ‘Sport Zone’, ‘Recreation Zone’, ‘Forest Park’, ‘Forests’, ‘Protected

*“Dentro del aspecto legal y de control del planeamiento, se observa cómo el realizado en la comarca en el decenio 60-70 ofrece el desolador dato de que tan sólo un 9,73 % de la superficie planificada ha sido calificada como de Parque Urbano, sin que se alcance el discutible 10 % previsto por la Ley del Suelo como mínimo legal obligatorio a cumplir por los Planes Parciales; tanto por ciento que, según la citada Ley del Suelo, debiera aumentar (art. 39-2) a tenor de lo establecido para las modificaciones tendentes a incrementar el volumen edificable de una zona” (Montero Madariaga, 1972: 14).*



**Fig. 189** This graph compares land use and classification approved by the Partial Plans in the 60s and 70s versus the ones anticipated by the 1953 Plan Comarcal (Montero Madariaga, 1972)

In their study, made between 1969 and 1970, Bach, Dols, Millet, and Páez (1971) in collaboration with Riba<sup>107</sup>, stated that the rapid growth, speculations, and private initiatives caused innumerable losses in green free spaces in Barcelona and its suburbs and peripheries as well as the rest of the region. The urban repercussions of such policy – already indicated in the posterior Master Plan of the Metropolitan Area– were alarming and included progressive reduction in the values of physical and psychological hygiene; difficulty in placing the social equipment of housing; deterioration of work conditions; problems in accessibility; increase in costs of public transportation; destruction of citizen

Landscapes’, and ‘Private Green Zones’. They could be installations of public and private use except in the case of urban parks and forests.

<sup>107</sup> The study published in “Los espacios libres en Barcelona” *Cuadernos de arquitectura y urbanismo*, no.83, 1971 was based on another study ‘Estudio del Equipamiento Deportivo y Espacios Libres para equipo de ocio. Barcelona y su comarca’ written by the same authors in collaboration with Fernando Riba assigned by the ‘Comisión de Urbanismo y Servicios Comunes de Barcelona y otros Municipios’ made between June 1969 and June 1970.

values; environmental degradation; and loss of significant spaces and places. And the reversion or rectification in many cases is already impossible especially given the exorbitant costs this would entail.

They divided the free spaces into:

- 'Utilizables' or usable meaning equipped with installations whether sports, recreational, or spaces of relaxation like gardens and squares with benches, greenery, lighting, and playgrounds, or classified as beaches and forests.
- 'Vacantes' or vacant corresponds to free spaces that were left with no usage, equipments, urbanization, and a difficult public or collective access.
- 'Ocupados' or occupied with illegal constructions or whose difficult topographical conditions make them practically unusable.

These categories were used as a detailed graphic study measuring and comparing green free spaces in Barcelona and its region as well as in their inner urban areas and outer urban areas (meaning within the urban areas of the municipalities and surrounding or around these urban areas).

In Barcelona and the whole region, the table shows 30.7% of vacant green free spaces in the inner urban areas, and 48.5% of occupied ones which is high compared to the 21.1% of usable ones.

In relation to Barcelona and its neighboring municipalities the numbers also show irreversible losses of green free spaces. From the 403.2 hectares zoned in the Barcelona's inner urban area only 129.2 hectares are usable. The same problem goes for the rest of the municipalities. In some cases, like in Cornellà, the sum of the categories is greater than the zonified free land due to the existence of an urban park or recreational installations in an area not classified for such use.

Area	Inner Urban Areas in hectares			
	Zoned free spaces	Usable	Vacant	Occupied
Barcelona and Region	884.5	186.6/21%	269.8/30.7%	428.1/48.3%
Barcelona city	403.2	129.2	152	124.6
Cornellà	21.6	3.0	3.0	18.6
Esplugues	23.7	0.0	6.1	17.6
Hospitalet	58.2	4.9	21.9	31.4
Badalona	24.2	7.4	11.2	5.6
Sta. Coloma de G.	5.5	0.7	1.6	3.9
S. Adrià	45.6	2.6	19.4	32.6

Table of the zonification and usage of green free space in hectares in Barcelona and the neighboring municipalities obtained between 1969 and 1970. (Author's elaboration from Bach, Dols, Millet, Pérez, 1971)



Barcelona	Inner Urban Areas in m2/inhabitant			
	Zoned free spaces	Usable	Vacant	Occupied
Ensanche	1	1.2	0	0
Old Town	0.6	0.3	0	0.3
Gràcia	0.6	0.4	0.3	0
Sants/Poble Sec	0.5	0.3	0.2	0
Sagrera/Maragall	0.5	0.1	0.1	0.4
West Residential area	7.4	6.7	0.7	1
East Residential area	3.8	0.3	1.7	1.8
S. Andreu/Bon Pastor	2.2	0.2	0.3	1.7
Poble Nou	4.3	0.3	3.1	0.7
Zona Franca	0.3	0.9	0	0

Table of zonification and usage of free spaces in m2/inhabitant in the inner urban areas obtained between 1969 and 1970 (Author's elaboration from Bach, Dols, Millet, Páez, 1971)

In Barcelona city, from the 2,364 hectares of green free spaces established in the Plan Comarcal and its Partial Plans, 882 hectares are designated for Urban Parks, 215 hectares for Sports and Recreational Zones, and 1,267 hectares for Forest Parks and Forest. This whole sum represents 25% of the Barcelona's whole surface. This means the number of green spaces it possesses theoretically is 13.5 m2/inhabitant, a low number compared to other European cities (Amsterdam 23.5 m2/inhab, Roma 46 m2/inhab, Rotterdam 30 m2/inhab, New York 19 m2/inhab, etc.). However, those numbers in reality were even lower than that of 4.97 m2/inhabitant in 1968.

Considering the inner urban areas, the data shows that first, the areas corresponding to traditional urban centers and older urbanizations like the Old Town, Gràcia, Sants, Poble Sec, Ensanche Cerdà, Maragall, and Sagrera have less free spaces than the recent urbanizations of San Andreu, Bon Pastor, Poble Nou, and the East and West residential areas that have significantly a higher number. However, the level of unused free spaces, whether vacant or occupied, is higher in the peripheries.

Second, the Old Town despite its overpopulation and degradation has the highest equipment level. And in the case of the Ensanche the equipped spaces are higher than than the zoned one despite its lack of free spaces reduced to Plaça de la Sagrada Família and Plaça Letamendi.

Third, the West residential area, mostly of high standing, like San Gervasi, Pedralbes, Les Corts, and Sarrià have a number of equipped free spaces, whether urban parks or recreational and sports facilities, way higher than the East residential area occupied

mostly by working class citizens and immigrants where a high number of their free spaces are left unequipped, vacant or occupied and this clearly shows urban inequality and discrimination in the city.

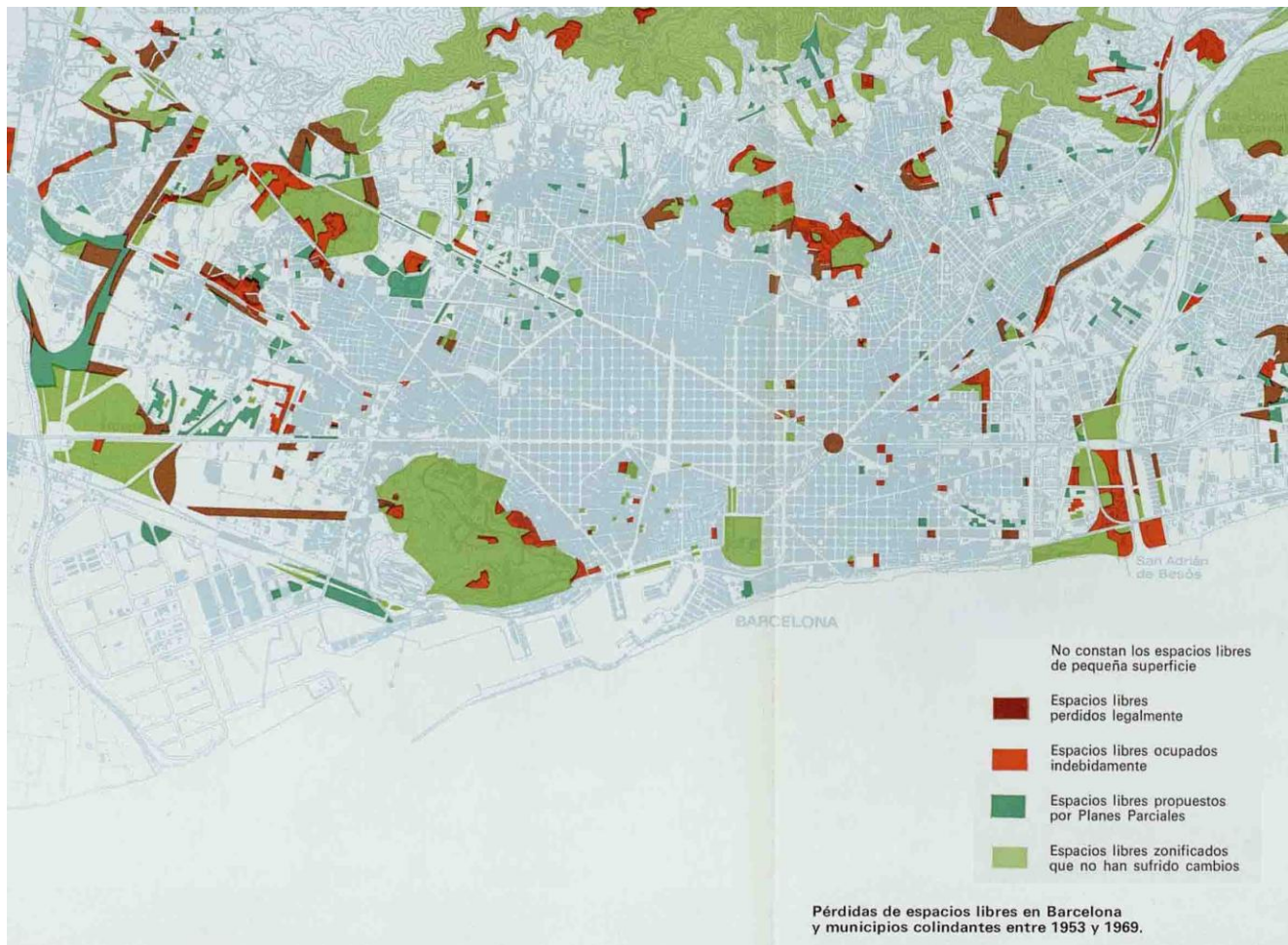
As for the outer urban areas of Barcelona, they are mostly accumulated in Tibidabo and Montjuïc where 25% are usable leaving the 75% vacant, inaccessible or illegally occupied.

From the 1294.4 hectares of the whole region, 463 hectares were legally lost because of the Partial Plans whereas 831.4 hectares were illegally occupied.

*“La actuación mediante Plan Parcial es eficaz y legal. No obstante, existen otros sistemas de usufructo del suelo público sin necesidad de cambiar su calificación. La «concesión» provisional, que permite utilizar a la empresa privada una zona verde, p.e., durante 30-50 años a cambio de darla en propiedad al Ayuntamiento al finalizar la concesión, es para estas, sin duda, un sistema cómodo de adquirir suelo, pero bastante oneroso para la colectividad, que debe hipotecar durante décadas la utilización real de un suelo que legalmente es suyo”* (Bach, Dols, Millet, Páez, 1971: 36).

Moreover, there was scarcity of economic means and recourses on the part of the public administration and management which could not meet the financing necessary to cover the accumulating deficits of free spaces. And in the action programs of several local corporations of the region of Barcelona, there was no amount to extend free land or to provide equipments, installations, and green spaces intended for the respective population. The deficits were not exclusive to the large green zones, equipments and facilities but also to the small ones on the scale of the neighborhoods since they were not economically profitable:

*“hay que añadir a los déficits provenientes de la realización de estas grandes zonas todos los déficits acumulados por la no realización del Equipamiento a escala zonal y de barrio [...] que normalmente proponen, o deberían proponer, los Planes Parciales, y que no existen por la nula normativa al respecto y la poca generosidad de aquéllos, y porque significan ocupar un suelo con instalaciones no rentables económicamente a corto plazo”* (Teixidor, Tarragó, Brau, 1972: 81).



**Fig. 190** Map showing the loss of free spaces between 1953 and 1969 not counting the small-scale spaces. Brown corresponds to free spaces legally lost; Red to free spaces illegally lost; Dark Green to free spaces proposed by partial plans; and Light Green to free spaces that remained unchanged (Bach, Dols, Millet, Páez, 1971)

Since purchasing land destined for parks and public spaces was minimal, the ones that were indeed created and constructed during those years had already been acquired by previous municipalities; were traded or exchanged with private landowners; or through the cession and assignment of the State's administrative agencies.

Naturally it was worse for the small-scale public squares and gardens anticipated for the highly dense neighborhoods. The City Council acquired neither a defined policy nor elaborated a program concerning the small-scale squares and gardens. Their creation was rather an excuse to justify the increase in construction and density in certain areas (Fabre, Huertas, 1988).

From the Civil War until the arrival of Porcioles to the City Council, the only park created was Parc Monterols –already foreseen in Rubió i Tudurí's parks system– inaugurated in

1947 and created by Luis Riudor i Carol who took over the 'Dirección de Parques y Jardines' (1940- 1968) after Rubió i Tudurí was exiled between 1938 and 1946<sup>108</sup>.

Since municipal concerns were poured in other directions, it wasn't until 1964 –seven years into Porcioles's mandate– that the second park, Parc Cervantes, was created as part of the Partial Plan of Diagonal's 'Sector Final'.

Then followed the series of parks and gardens in Montjuïc between 1966 and 1970 with the intent to eliminate the slums settled in the mountains such as; Parc d'Attraccions de Montjuïc (Joan Brossa) (1966); Mirador de l'Alcalde (1967); and the new director Joaquim Casamor (1968- 1986) continued in creating Jardins mossèn Jacint Verdaguer, Jardins Joan Maragall, and Jardins Costa i Llobera (1970) (Villoro, Riudor, 1984).

In 17 March 1969, Porcioles pronounced a discourse before the municipal plenary that the city's growth in green areas is of 7m<sup>2</sup> per inhabitant and more parks and gardens will be built to decrease the deficit. One year later, he declared to the press that more green spaces will be created and the economic limitation in buying land is subsiding due to the modifications in the Plan

*"a) De un promedio de gastos de conservación de 30 millones de pesetas anuales, durante el período de 1950 a 1955, se ha pasado a 140 millones en 1970, lo que significa un aumento de 366'66 por ciento.*

*b) De una consignación para repoblación forestal y de arbolado de la ciudad, cuyo promedio anual en el citado período de 1950 a 1955 fue de 750.000 pesetas, se ha pasado en 1970 a 5.100.000 pesetas, que representa un aumento del 588 por ciento.*

*c) En la adquisición de espacios verdes se ha pasado de una cantidad ínfima anual en el período 1950-55, a los 88,3 millones de pesetas anuales en el período 1969-74,*

*d) Para la construcción de nuevos parques y jardines, el salto ha sido, en los mismos períodos, de 13,7 millones anuales, a 70,9 millones del 417,51 por ciento. [...]*

*[...] lo que ha permitido el establecimiento de los nuevos parques que se relacionan a continuación, distribuidos de la siguiente forma: Parques forestales, 123,21 Ha.; parques urbanos, 42,34 Ha.; jardines urbanos, 23,11 Ha., y parterres vía pública, 2,34Ha."* (LVG, 1970-03-08).

From then on Casamor created Turó del Putxet (1970); Quinta Amelia (1970) giving way to the gardens known nowadays as Jardins de la Vil·la Amèlia and Jardins de la Vil·la Cecília; Parc del Laberint d'Horta purchased and opened to the public in 1971; and Parc de la Guineueta (1971) located in the Guineueta housing estate in collaboration with the Commission of Urbanism.

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<sup>108</sup> Rubió i Tudurí was exiled to Paris during the Civil War and in 1938 he worked from London as a representative of the Generalitat de Catalunya along with Josep Maria Batista i Roca managing to sign an armistice that isolated Catalunya from Spain. He did not return until 1946 where he began creating private gardens all over the country including Jardins Jaume Vicens i Vives that was opened to the public in 1990. His last public garden was Plaça de Gaudí in 1981.





**Fig. 191** “Als Caiguts” on Diagonal in front of Palau de Pedralbes inaugurated in 1951, then transferred to the site of the MNAC in 2001 before being destroyed in 2005 (Fabre, Huertas, Barral, 2004. art públic)

The sides of the Diagonal’s upper west side were landscaped with gardens and squares including Plaça Pius XII<sup>109</sup> created for the ceremony of the 1952 XXXV Eucharistic Congress, and where for the same occasion ‘Als Caiguts’ monument (Fabre, Huertas, 2004. Artpúblic) was placed not far from Plaça Pius XII, a work of Florensa, Vilaseca and the sculptor Josep Clarà. In addition to that, the sides of Barcelona’s beltways and ring roads were also landscaped.

The installations and equipments developed included the recreational areas in ‘Zona Recreativa de Montjuïc’, sports areas in ‘Zona Deportiva del Club Barcelona’, sanitary areas in ‘La Maternitat’ and ‘Zona Sanitaria del S.O.E Vall d’Hebron’, and university areas in ‘Zona Universitaria’ among others, as well as public services, schools, and religious buildings.

As for small-scale public squares, they suffered most, but though not being a priority or profitable they were still created and distributed in Barcelona’s center and surrounding neighborhoods for the purpose of providing the citizens small decongestions and alleviations within the extensively built neighborhoods.

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<sup>109</sup> Fabre and Huertas commented in “A Pius XII”: *“The square named after Pius XII [...] for the International Eucharistic Congress, a very significant event in the Catholic world. The square was chosen as the site for the most important ceremony of this religious congress. [...] The square was constructed on a site that during the post-war period had been occupied by shacks and lean-tos built by immigrants who had come to the city seeking work. The closing ceremony of the Eucharistic Congress was held in the square on Whit Sunday in June, 1952, before an immense altar designed by the architect Josep Soteras. This altar, dismantled after the congress without a second thought, would today be regarded as an installation piece in itself....”* (Fabre, Huertas, 2004. Artpúblic)

As discussed in the previous chapter, Ciutat Vella's partial plan held Florensa's restorations and 'esponjamiento' of small-scale squares that continued after the Civil War and into the first decade of Porcioles era. In addition, due to the increase in traffic in the old town several streets were converted into pedestrian streets prioritizing pedestrian circulation in the city such as Carrer Boqueria, Carrer Portaferrissa, and Portal del Àngel.



**Fig. 192** The Minister of Obres Públiques Sr. Peña, visiting the working site in Plaça de Molina (Perez de Rozas, 1941. AFB)



**Fig. 193** Subterranean construction of Gràcia's F.C. railways in the site of Plaça Gal·la Placidia (Barrillon, 1927-1932. AMDG)

Outside Ciutat Vella, the surrounding neighborhoods' urban centers already possessed a number of historic small-scale squares which were complemented with new ones of different sizes but nevertheless on the scale of the neighborhood. Despite their difficult situation, thanks to Riudor and Casamor they were created, landscaped, planted with trees and public art, and most importantly acted as small green lungs between the surrounding dense dwellings.

After the Civil War, few new squares and gardens were built and as Borja explained:

*“Durante los primeros decenios de la posguerra (años cuarenta y cin cuenta) se prohíben la mayoría de las actividades colectivas en las pla zas y calles, a menudo incluso las fiestas y otros esparcimientos. Progresivamente, en los años cincuenta, habrá una modesta y lenta reconquista del espacio público por parte de la población: fiestas, ocio, bailes, actividades culturales o bajo la apariencia de actos religiosos. La actividad política es exclusiva del gobierno y del partido “único”, el espacio público es un asunto de Estado” (Borja, 2010: 72).*

However, when resuming the works on the railway tracks and tunnel on Via Augusta, **Plaça Gal·la Placídia** was created along in 1944 and Plaça Molina was remodeled. The tunnel that connected Plaça Catalunya to Plaça Molina passing through Diagonal up Via Augusta was a project dating back to the first dictatorship and inaugurated in 1929. But some of the tunnel’s unfinished parts were interrupted in 1931 to be resumed in 1940 triggering the creation of the said square-garden. Three years later a fountain ‘Font de Blacaneu’, the work of Josep Manuel Benedicto, was placed (Fabre, Huertas, 2004. Artpúblic).



**Fig. 194** View of one side of Plaça Gal·la Placídia in 1951 (Vilamitjana, 1947-1960. AMDG)





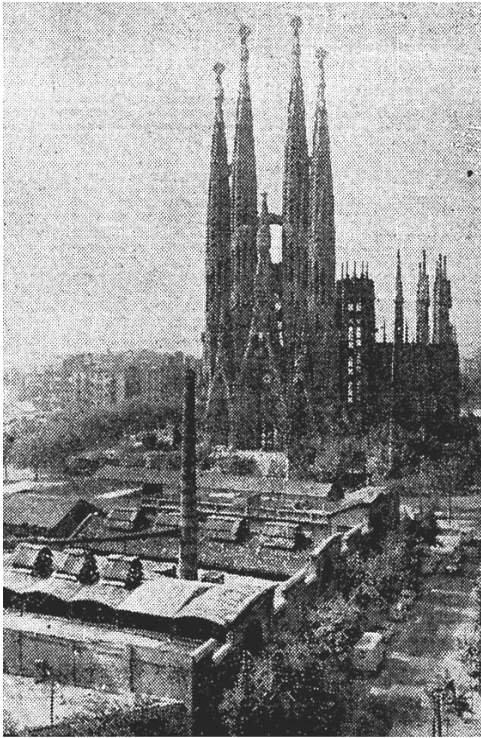
**Fig. 195** View of Plaça Gal·la Plàcidia with the 'Font de Blancaneu' in 1951 (Palau, 1951. AMDG)

In the 1950s, **Plaça Sagrada Família** –Rubió i Tudurí's project in 1928– was another square to be transformed for the XXXV Eucharistic Congress. As a matter of fact, the space on the other side of Sagrada Família church, which is now Plaça Gaudi, was qualified by the Plan Comarcal as a 'green zone' but it was occupied by warehouses and buildings, and at the same time Plaça Sagrada Família was found in a state of degradation. Therefore, in 1951 it was remodeled with new pavements and greenery, but Plaça Gaudi remained occupied for several decades until it was urbanized by Rubió i Tudurí himself in 1981.

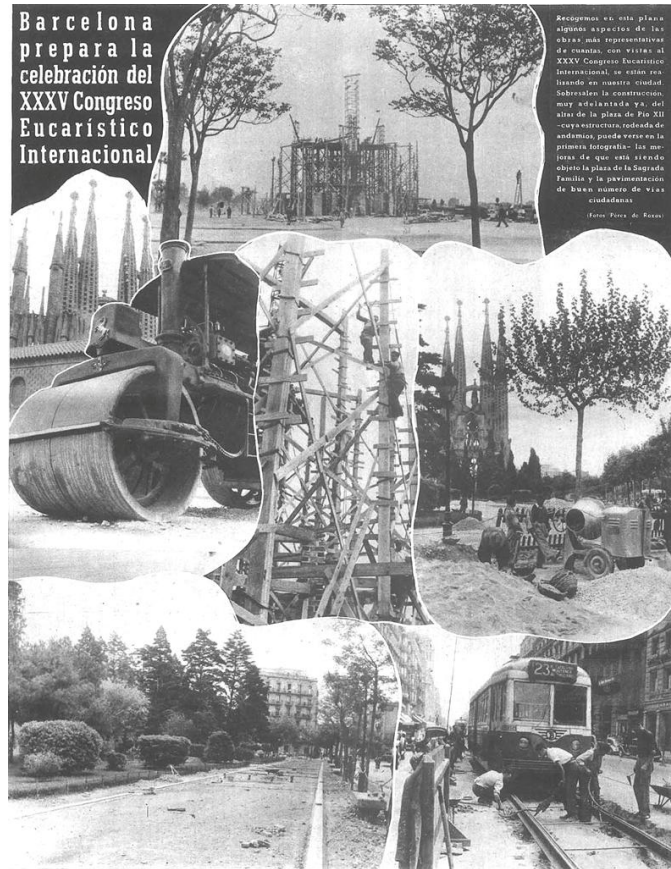
Five years later, new benches were installed as well as a children's playground and skating area (LVG, 1957-06-01), and after 1957 the square was subjected to constant remodelings and renewals. In the 1970s they placed Pere Flaqués's street lights (1909) – that were originally placed in Cinc d'Oros (Plaça Juan Carlos I) until 1957– before being permanently moved to Avinguda Gaudi in 1985.

*"La maltrecha y desgraciada plaza de la Sagrada Família y la nonnata y pretendidamente olvidada plaza de Gaudi, inexistente por cuanto el espacio a ella destinado está ocupado por almacenes y unas casas de pisos, forman parte del viejo barrio del Poblet, de San Martí de Provençals. [...] Y nunca ha sido así, sino todo lo contrario. Empecemos, para verle, por la actual plaza de la Sagrada Família, sumada como 'zona verde' a las que aún le quedan a Barcelona, cuando en realidad es 'zona marrón', gracias a que la conservación de las pocas plantas que allí crecen se hace prácticamente imposible y cuesta una auténtica fortuna el Municipio —al ciudadano—, porque salvo raras excepciones, se ve constantemente invadida de barracones e instalaciones de feria, con lo que se ha destruido, o casi, lo poco que quedaba de la jardinería proyectada por Rubió y Tudurí"* (LVG, 1973-12-08: 33).





**Fig. 196** View of the block occupied with factories where nowadays Plaça Gaudí is located (LVG, 1973-03-08)



**Fig. 197** Preparing Plaça Sagrada Família for the Eucharistic Congress (LVG, 1952-05-04)



**Fig. 198** The site in the 1930s of where Plaça Maragall is nowadays (Dominguez, 1930-1935. AFB)



**Fig. 199** Plaça Maragall in 1951 (Unknown, 1951. AFB)

On Passeig Maragall in Horta neighborhood, the first urbanization of **Plaça Maragall** dated back to the 1940s and was resumed in the 1950s after being halted during the war.

In the mid 1950s, with the metro reaching Avinguda Meridiana, **Plaça Ferran Reyes**, located on both sides of the avenue, was inaugurated in 1954 in Navas neighborhood Sant Andreu. Two decades later, part of the square was dedicated to the new vanguardista church of Sant Joan Bosco (1977).

Another square created with the arrival of the metro is **Plaça Virrei Amat** in 1959 located in what became to be known in 1984 as Nou Barris.

Near Parc del Monterols, **Plaça Corint** was created in 1956 with a sculpture placed in the middle 'Els Timbalers del Bruc' designed by Frederic Marès (Fabre, Huertas, 2004. Artpúblic).

One small residual block of the Eixample forming part of Avinguda Roma was converted into a square in 1958 known as **Plaça del Gall** due to Frederic Marès's cock sculpture, 'Font del Gall', placed in the square (Fabre, Huertas, 2004. Artpúblic).

In Gràcia, **Plaça Lesseps** was extended and redesigned in 1960 before being shortly destroyed and divided by the I Cinturón that caused long neighborhood and political controversies in the 70s and 80s before taking its final shape.





**Fig. 200** Part of Plaça Virrei Amat in 1960 (Unknown, 1960. AHRNB)



**Fig. 201** Plaça Lesseps in the 1960s (Fabre, Huertas, 1988)

During Porcioles's mandate, the new squares and gardens continued to be created and formed part of the partial plans of the sector they corresponded to. In addition, the City Council along with the Parks and Gardens department launched for the first time, between 1959 and 1961, a public art contest as part of their policy of embellishing and providing public monuments for some green areas in the city. This policy that continued beyond this date gave many of the newly created squares their public art. Ten sculptures won and four<sup>110</sup> more were spread around the parks and squares of the city including **Jardins de Moragas**, in Sarrià-Sant Gervasi, designed in 1959 by Riudor and Casamor

<sup>110</sup> Ten sculptures won the competition, in 1961, and were placed in Parc Monterols, Turó Park, Jardins de Labiral, Jardins Moragas, Parc del Guinardó, Plaça de Doctor Serrat, Plaça Vicenç Martorell, Plaça d'Adria, Plaça del Nen de la Rutlla, and Plaça del Congrés Eucarístic, and in the same year four more were placed, as part of the same policy, in Passeign Joan Borbó, Plaça Ferran Casablanas, Plaça de Montbau, and Plaça Carles Buigas. Check. Web Art Públic. Departament Urbanisme. Ajuntament de Barcelona- Universitat de Barcelona, [www.bcn.cat/Artpublic](http://www.bcn.cat/Artpublic)

after being a private garden to the Masia Moragas. In the same area, **Plaça Ferran Casablanques** was created, and **Plaça d'Adrià**, originally created by Rubió i Tudurí in 1930, was reurbanized in 1961. Both became part of the public art winners where in the former a sculpture by Àngel Ferrant, 'Enginyeria Tèxtil', was placed in the middle, and in the latter a sculpture by Manuel Silvestre de Edeta, 'Font de la Lliçó', decorated a newly placed fountain and pond in the square.

In Guinardó, Another sculpture that formed part of the contest, 'El nen de la rutlla', was placed in the newly created square **Plaça del Nen de la Rutlla** (formerly known as Plaça Francesc Puig i Alfons) in 1961. The square is part of the Parc del Guinardó's entrance.



**Fig. 202** 'Enginyeria Tèxtil' in Plaça Ferran Casablanques and 'Font de la Lliçó' in Plaça d'Adrià (Fabre, Huertas, 2004. Artpúblic)

In Sant Martí, Camp de l'Arpa neighborhood, **Plaça Sant Josep de Calassanç**, also known as Plaça de la Tortuga due to the presence of a tortoise sculpture created by Frederic Marés, was created in 1960. In 1991 a new turtle sculpture was placed in the square the work of Joan Bennassar (Planas, 2004. Artpúblic).

In the same year **Plaça Doctor Serrat** next to Avinguda Meridiana was constructed as part of the 'Levante Norte' partial plan. One of the winning sculptures, 'Repòs' by Claudi Tarragó (Fabre, Huertas, 2004. Artpúblic), was placed in Plaça Doctor Serrat in 1961 but was soon transferred to Barcelona's zoo after being vandalized. The square remained without a sculpture except for a commemorative plaque integrated into the parterre when it was remodeled in 1989 by Jordi Henrich. And in Poblenou, **Plaça Lope de Vega**, nowadays Jardins de Josep Trueta, was created in 1960 in the neighborhood's recreation and swimming pool terrain as part of the 'Levante Sur' partial plan.





**Fig. 203** The 1960 turtle sculpture in Plaça Sant Josep de Calassanç and on the right the new turtle sculpture nowadays (Prenafeta. C1980) (Author, 2017)



**Fig. 204** 'Repòs' sculpture once located in Plaça Dr. Serrat and nowadays placed in the Zoo (Fabre, Huertas, 2004. Art públic)



**Fig. 205** Above 'Font del nen' in 1950 in Plaça de Victor Balaguer before being moved to Can Mantega below (Unknown, 1950. AFB) (Author, 2017)

The squares created in Les Corts during that period originally belonged to sports facilities. **Plaça del Sol de Baix** was created around 1965 as part of 'Sol de Baix' partial plan. The area where the square is located was leased to the FC Barcelona in the mid 20s after demolishing Masia Sol de Baix with the purpose of converting the land into tennis courts and football fields. In 1932 the club's lease was terminated and the land was converted to racing tracks known as 'Canodrom Park' that functioned until 1951 before being converted into residential area with the square amid the new dwellings. Not far from the tracks stood the old FC Barcelona's stadium 'Camp de Les Corts'. Unable to hold their increasing spectators, the club moved to their newly purchased terrain and inaugurated the 'Camp Nou' in 1957. This gave way to **Jardins de Bacardí** created in 1960 right at the foot of the new stadium after the City Council expropriated the plot and demolished Can Bacardí in 1958. In its turn, the old stadium was demolished in 1966 and after many speculations and land requalifications **Jardins de les Infantes** and **Jardins de Can Cuiàs** were created in 1967 on one part of the terrain leaving the rest for dwellings and sports facilities.<sup>111</sup> They were created as part of 'Zona de la Diagonal y Las Cortes' partial plan.

In Sants, **Jardins Can Mantega** was created in 1962 in Masia Can Mantega's orchard that was replaced by new residencial buildings. A fountain with a child statue, 'Font del Nen', (Fabre, Huertas, 2004. Artpúblic) was placed in its premises in 1970 after taking a long journey from its first original location in 1880 in Sants's former market square (nowadays Plaça d'Osca) to the Town Hall square, Plaça de Victor Balaguer, where it stayed until 1969 before the area was destroyed to make way for the I Cinturón. The fountain was dismantled until one year later where it was reclaimed and located in its current place. Another square was created in 1957 that of **Plaça de la Farga** after demolishing an old soap factory that had been part Sants's series of industries and factories.

In Sant Andreu, Bon Pastor neighborhood, among a block of houses, a new square with a lamppost-fountain was created in 1964 known to the inhabitants as **Plaça de la Concòrdia**. The lamppost-fountain as Remesar pointed out were "*a symbol of punctuation and centrality in the public space-road of the block of houses*". But for many years it was subjected to vandalism and malfunction. When urban improvements began in the neighborhood during the 1992 Olympics, "*that was when the residents negotiated with the City Council to convert the lamppost-fountain, useless and worn down, into a sculpture. A simple job for a builder who reconstructed the object into a white obelisk. The fifth obelisk in the city*" (Remesar, 2004, Artpúblic).

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<sup>111</sup> Sources from Arxiu FCB and CR POLIS's Ruta de la Memòria Històrica de Les Corts, <https://rutadememoria.wordpress.com/>



Fig. 206 Plaça del Jardins d'Elx in 1966 (Unknown, 1966)



Fig. 207 The old sculpture 'Dama d'Elx' before being removed and replaced in 2009 by a bust (2004, Artpúblic) (Author, 2017)

In Sant Andreu de Palomar neighborhood, a small square **Plaça de la Pomera** was created in 1968 as a result of the metro works. Moreover, in Sagrera neighborhood, **Plaça del Jardins d'Elx** also known as 'Plaça de l'Església' or 'Camp de la Missa' (Centre de Documentació de la Sagrera) was urbanized in 1966, during the Mercè, after being an empty lot in front of Crist Rei church. It was landscaped, planted with trees and a small channel over which a bas-relief of the 'Dama d'Elx', the work of Ferran Bach-Esteve, was placed continuing the City Council's public art policy. The sculpture remained until 1983 when the whole square was remodeled by Oriol Bohigas, and returned in 2009, in the form of a bust (Fabre, Huertas, 2004. Artpúblic).

In 1972 on Passeig Maragall, a new sculpture was placed on a new square between street intersections commemorating 'Al Doctor Ferran' (Fabre, Huertas, 2004. Artpúblic) whose laboratory used to be near the square. In 2002 the square was remodeled and officially named after him as **Jardins Jaume Ferran i Clua**.

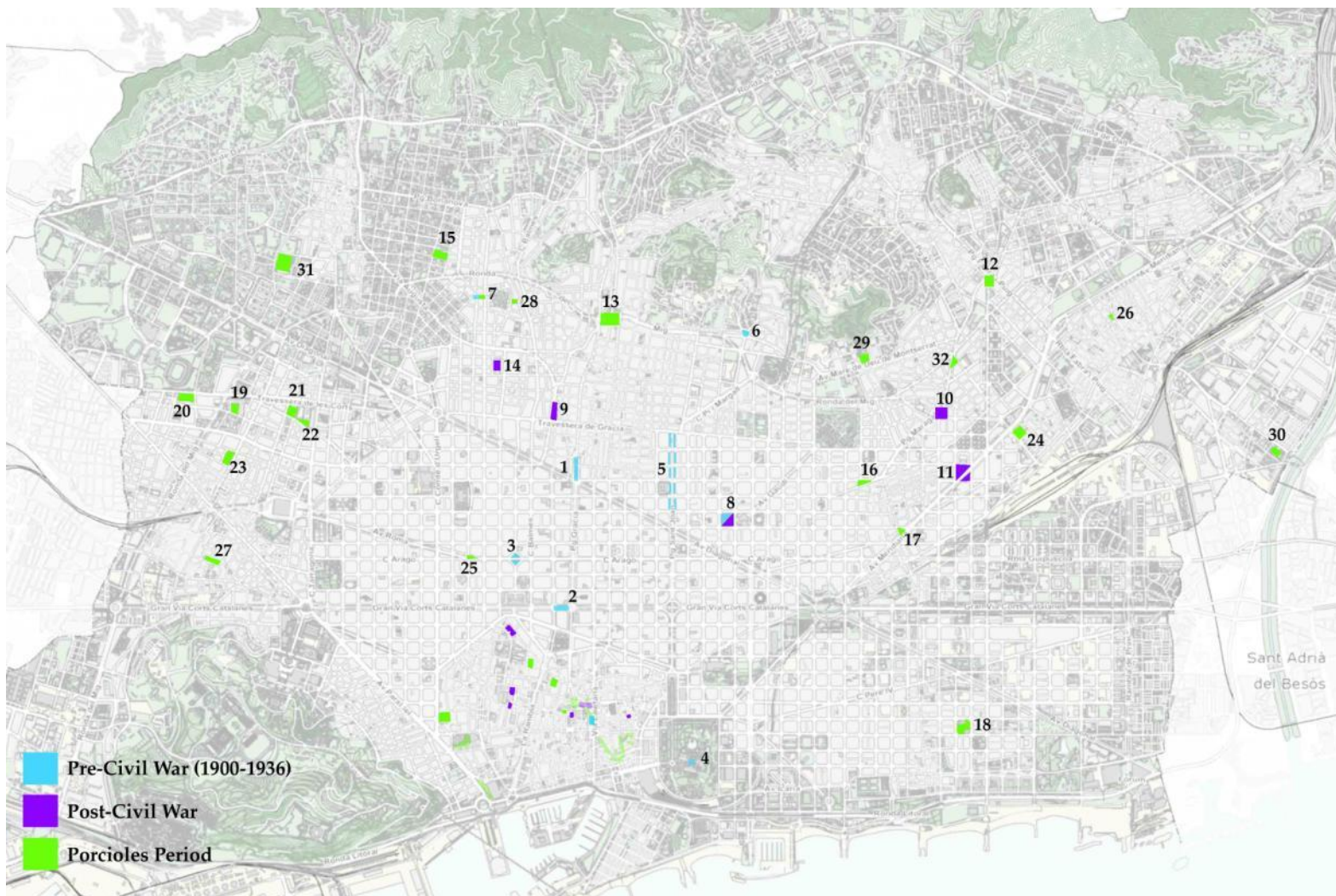
Upon his return from exile, Rubió i Tudurí worked in the private sector creating private gardens like Jardins Jaume Vicenç i Vives in 1967 that was converted for public use in 1990. Its main characteristics are the series of animal sculptures, 'Conjunt d'animals', the work of Frederic Marès, scattered around the garden.

Another garden that was opened to the public is **Jardins de Vil.la Amèlia**, mentioned earlier, that was remodeled into a public garden in 1970 and three sculptures were placed, 'Driade', 'l'Encantador de Serps' and 'Nu femení', the works of different artists (Fabre, Huertas, 2004. Artpúblic).

Current space	Original space	Date of current space	Future changes
<b>1. Jardinetes de Gràcia (Plaça Salvador Espriu)</b>	Empty space part of Gran de Gràcia	1929	1961 new sculpture added
<b>2. Plaça Reina Sofia</b>	Empty space part of Gran Via	1921	
<b>3. Plaça Letamendi</b>	Crossroad Eixample	1928	
<b>4. Plaça d'Armes</b>	Inside Ciutadella	1921	
<b>5. Jardins de Sant Joan</b>	Part of Passeig St Joan	1930	
<b>6. Plaça Sanllehy</b>	Residual space between streets	1929	2006-2015 totally remodeled due to metro
<b>7. Plaça d'Adria</b>	Residual space between building	1930 / 1961 remodeled	2003 new sculpture added
<b>8. Plaça Sagrada Familia</b>	Empty Eixample block	1928 / 1951 remodeled	1975 renovated / 2010 remodeled
<b>9. Plaça Gal·la Placídia</b>	Part of train tracks on Via Augusta	1944 / 1947 sculpture added	1985 renovated
<b>10. Plaça Maragall</b>	Residual space part of Passeig Maragall	1950	2013 remodeled – sub. parking
<b>11. Plaça Ferran Reyes</b>	Residual space part of Avinguda Meridiana	1954	1988 renovated
<b>12. Plaça Virrei Amat</b>	Residual space along Av. Borbó	1959	1999 remodeled
<b>13. Plaça Lesseps</b>	Historic square passed through various changes	1960 / destroyed with I Cinturón	1980s several remodeling until inauguration in 2006
<b>14. Jardins de Moragas</b>	Garden of Masia Moragas	1959	
<b>15. Plaça Ferran Casablanças</b>	Green fields	1961	1999 sculpture reconstructed in bronze
<b>16. Plaça Sant Josep de Calassanç</b>	Residual space in front of building between two streets	1960	1991 renovated/ new sculpture
<b>17. Plaça Doctor Serrat</b>	Residual space in front of building between two streets	1961	1989 remodeled
<b>18. Plaça Lope de Vega (Jardins de Josep Trueta)</b>	Empty space around equipment	1961	1989 remodeled
<b>19. Plaça del Sol de Baix</b>	Camp de les Corts terrain	1965	1989 remodeled
<b>20. Jardins de Bacardi</b>	Garden of Can Bacardi	1960	1983 remodeled
<b>21. Jardins de les Infantes</b>	Camp de les Corts terrain	1967	1983 remodeled



<b>22. Jardins de Can Cuiàs</b>	Camp de les Corts terrain	1967	1986 remodeled
<b>23. Jardins Can Mantega</b>	Garden masia Can Mantega	1962	1970 sculpture / 2015 remodeled
<b>24. Plaça del Jardins d'Elx</b>	Residual space	1966	1983 remodeled / 2009 sculpture returned / 2011 renovated
<b>25. Plaça del Gall</b>	Residual small island in Eixample on Av. Roma	1958	1984 renovated
<b>26. Plaça de la Pomera (Rubén Dario)</b>	A series of small houses	1968	1984- 1994 renovated
<b>27. Plaça de la Farga</b>	Factory / residual space after demolition of factory	1957	
<b>28. Plaça/C. Corint</b>	Residual space	1958	
<b>29. Plaça Nen de la Rutlla</b>	Entrance to Parc del Guniardó	1961	Took its current name in 2001
<b>30. Plaça de la Concordia</b>	Residual space	1964	Remodeled 1992 with new sculpture
<b>31. Jardins Vil.la Amèlia</b>	Garden masia Qunita Amèlia	1970	Remodeled 1986
<b>32. Jardins de Jaume Ferran i Clua</b>	Residual space between streets	1972	Remodeled 2002



List of small-scale squares created between 1939 and 1974 complementing the ones in Ciutat Vella. It includes squares created during the pre-war era, though not part of this chapter's study, to contextualize the amount of squares created and because some were remodeled during the post-war era. Moreover it does not count the already existing historic squares in each municipality (Author's elaboration from different sources. Fabre, Huertas, 1988; Villoro, Riudor, 1984; Bru, 1982; Florensa, 1957, 1958, 1959; bcn.cat/Artpúblic) Noting that almost all these squares were renovated or refurbished in the 1980s.

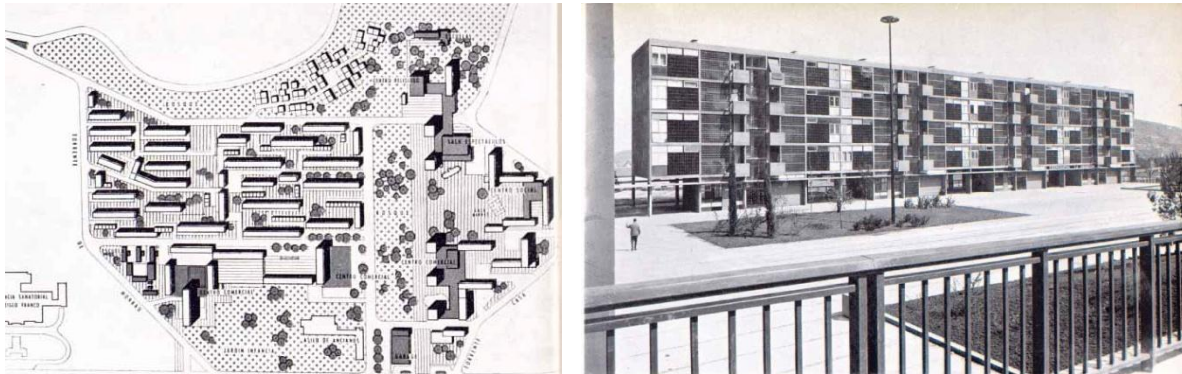
Considering the 'poligonos de vivienda', they are mainly expected to form their own public spaces. Yet it is significant to rapidly highlight the new squares and gardens created around and among them like those in Congrés, Sant Martí, South-West Besòs and that of Montbau in particular.

Montbau is located next to Vall d'Hebrón and the first sector was carried out by architects Guillermo Giráldez, Pedro López, Xavier Subías in 1957, and the second sector by Manuel Baldrich, Antonio Bonet, Pedro López and José Soteras in 1962.

According to Oriol Bohigas, it was for a while a "*vedette urbanística*" that could have been an exact parallel to the Interbau in Berlin (Bohigas, 1965: 24). The successive of squares are

placed around parallel and uniform buildings creating a contrast. He considered Montbau's central squares as *"uno de los mayores aciertos del urbanismo barcelonés de postguerra"* (Bohigas, 1965: 24) designed by the same architects as a whole urban space of quality and coexistence where commercial use is mixed with the housing blocks:

*"La calidad arquitectónica de esta zona y el cuidado en el landscape es superior a la del resto del polígono. No hay duda que este hecho hace mejorar extraordinariamente el juicio sobre su calidad urbanística. Es decir, la calidad del diseño arquitectónico es esencial incluso en los puros resultados urbanísticos, y esto conviene afirmarlo en un momento en que se está produciendo entre los arquitectos de todo el mundo el gran boom cultural del urbanismo que induce a menudo a considerar excesivamente intrascendentes los detalles de diseño y que ha inducido ya a redactar un nuevo plan de estudios con una evidente desproporción a favor de las amplias perspectivas de planificación territorial"* (Bohigas, 1965: 26).



**Fig. 208** The first plan of Montbau housing estate with the parallel blocks and the public spaces and squares in between (Bohigas, 1965)

A close attention was paid to the design and details of Montbau's squares whether the pavements, urban elements and furniture, flowerbeds, and even public art like the sculpture of Marcel Martí 'Ritme i Projecció' placed in the Plaça de Montbau in 1961 as one of the competition winners unveiled in the city.

However, it was not the case in other housing estates particularly in working class areas as in Trinitat Nova or South-West Besòs. Most of these areas held large amount of free spaces –when compared to the Eixample for example– to be dedicated to gardens or installations, but they were left undeveloped, un-urbanized and unequipped. The parallel repetition of the poorly designed blocks left depersonalized spaces devoid of identity sometimes designed and urbanized *a posteriori* or not urbanized at all. The free areas dedicated to green spaces were badly maintained and converted into brown spaces as Tusquets pointed out *"la penosa realitat es que el estat de los espacios verdes (que major podríem llamar marrons) déjà mucho que desear"* (Tusquets, 1965: 44).

One could still find symbolic public arts intended to dignify the areas the likes of 'Cooperació' and 'Matrimoni', by Josep Ricart i Maymir, placed in 1967 in Sant Martí near the housings of Carrer Pont del Treball, or 'Cooperative de Tramvies' (1968) and



'Theolongo Bacchio' (1973) on Carrer Prim in the South-West Besòs (Fabre, Huertas, 2004. Artpúblic).



**Fig. 209** The public spaces, and commercial and civic centers in Montbau compared to the ones in South-West Besòs in the bottom (Bohigas, 1965:27) (Tusquets, 1965:43)

However, concerning this difference in the urban development of the different sectors, Fabre and Huertas (1988) implied the application of “classism” in the urban development of the Plan Comarcal. The plan reserved the less healthy and marginal zones to working class neighborhoods where facilities and green areas were minimal like in the marshy Besòs area, whereas it reserved the landscaped, low-density zones to bourgeois neighborhoods well equipped with facilities, green zones, and high-standard residences like in the upper Diagonal area. Unlike the Cerdà’s plan, it lacked the urban monotony and equality cautiously perceived by Cerdà:

*“Tota aquesta zona més pròxima al Besòs havia sigut pantanosa i insalubre, una veritable maresma, tal com recorda el nom d’una dels carrers més importants. Per això, segurament, el pla comarcal la va reservar com a zona d’habitage obrer, mentre que situava a la part alta de la Diagonal, on l’aire és sa, un sector residencial d’alt nivel. Aquestes són les possibilitats que ofereix el mecanisme urbanístic de la zonificació, que Ildefons Cerdà no va utilitzar. Per això, del seu pla d’eixample, en va resultar un urbanisme igualitari que els conservadors van qualificar sempre monoton. La falta de monotonía, en canvi, pot portar a*



*resultats urbanístics com els que va propiciar el pla comarcal del 1953, si els que tenen el poder de decisió sobre els afers urbanístics no actuen sota el control de mecanismes democràtics: barris burgesos amb àmplies zones enjardinades, ben equipats, de baixa densitat humana, amb elements arquitectònics de qualitat, i barris obrers hiperdensificats en zones marginals i insalubres, sense zones verdes i amb pocs equipaments. Ben separats els uns dels altres. Les actuacions posteriors per dignificar mínimament tots els barris sorgits en la zona de Llevant no han pogut esborrar del tot els vicis originals d'un urbanisme que premeditament els va concebre marginals i d'una arquitectura que va reforçar aquest caràcter" (Fabre, Huertas, 1988: 351).*

Clearly the rupture in balance and equilibrium was prevalent. The newly created green spaces could not compensate or keep up with the uncontrollable growth. The whole region had been transformed into a dense integrated metropolis that suffered from progressive social segregation and urban conflicts. The majority of the designated green public spaces remained illegally occupied, vacant, or left without architectural and urban qualities, or services: *"el aumento de población desencadena un proceso de creciente ocupación especulativa del suelo urbano, dentro de la cual el espacio libre es un vacío, el negativo de un suelo ocupado por residencia o empleo"* (Bach, Dols, Millet, Páez, Riba, 1971: 56). Barcelona's urban fabric became severely degraded and congested which led to the revision of the Plan Comarcal and to the appearance of neighborhood social oppositions that were at its peak during Porcioles era.

### **Revision of the Plan Comarcal**

Meanwhile in the 60s, almost 10 years after the Plan Comarcal's approval, concerns over the escalating urban, social and economic problems evoked early talks of modifying the plan.

In 1962, the 'Comisión de Urbanismo' asked the Ministry of Housing authorization to restudy and reconsider the 1953 Plan Comarcal, which had actually been suggested and discussed in the 1st National Congress of Urbanism in 1959 (Serratosa, 1997).

After many reunions and studies a 'Comisión Técnica para la Revisión del Plan Comarcal' (Technical Commission for the Regional Plan's revision) was created in 1964 for an early revision of the Plan especially that the 15 years that the Land Bylaw granted the plans were not yet fulfilled. Josep M Ros i Vila was responsible for gathering a technical team that consisted of two working groups (Equipo Director, Equipo Base), consultants and specialists with the collaboration of Josep Soteras i Mauri and Manuel Baldrich i Tibau. Among the architects and engineers in the teams were Emili Bordoy i Alcantara, Manuel Ribas i Piera, Albert Serratosa i Palet, Manuel de Solà-Morales, to name a few.

For two years the Commission was busy studying, analyzing, collecting data, and elaborating the new plan during which it declared, in 1965, its main principles and objectives. At the same time it created the concept of 'Àrea Metropolitana de Barcelona' (AMB) that corresponded to a field of study of 3,000 square kilometers along a 100

kilometer coastal strip of Barcelona province. By 1966 the first phase of the work was finalized under the name of 'Plan Director del Area Metropolitana de Barcelona (Master Plan of the Metropolitan Area of Barcelona). However, its final approval was on 24 July 1968 by the Sub-secretary of the Ministry of Housing.

The second phase consisted in dividing the work into the 1953 Comarcal Plan itself and the Metropolitan Area which in turn was considered as an 'Área de Acción Inmediata' (Immediate Action Plan) applied to various municipalities in the metropolitan area, and that of 'Infraestructuras Generales del Área Metropolitana' (General Infrastructures Plan). At the same time Barcelona City Council had its own team that developed a general municipal plan.

The Commission started by the complicated process of delimiting and defining Barcelona's Metropolitan Area<sup>112</sup> due to the fact that Barcelona had legal jurisdiction for restudying only 27 of the 135 municipalities. The AMB was defined and included seven regions: Barcelonès, Baix Llobregat, Vallès Oriental and Occidental, Marseme, Garraf and Alt Penedès. A multidisciplinary work team was organized in groups according to different disciplines where architects worked on the physical study of the urban form and structure, engineers focused on land reserves, and economists and sociologists collaborated in statistical data.

The Master Plan considered a different approach towards the status of urbanization and the functional relationship between urban centers. Its main objective was the decongestion of Barcelona's AMB which was an obvious and indisputable objective (Solà-Morales M., 1972). It aimed at a demographic, residential decongestion and industrial relocation based on the problems of densification, urban growth, massive marginal operations, and the territorial expansion of Barcelona city. As a matter of fact, while the works of the Plan were being presented in 1967 to the 'Consejo Pleno de la Comisión de Urbanismo' (Full Council of the Commission of Urbanism), it was suggested to modify its name to 'Estudio de decongestión de la Comarca de Barcelona' (Decongestion Study).

The Plan also aimed at: achieving a maximum collective economic welfare; social and cultural reinforcement; incorporating a road network; providing enough free and recreational spaces and increase contact with nature; and finally supporting a "*ciudad-territorio*" (territory-city) model (Solà-Morales M., 1972) of decentralizing and redistributing the tertiary sector and activities through creating a system of coherent and interdependent centers and sub-centers located according to the population and infrastructures, inscribed to the maximum in the topography and landscape, and

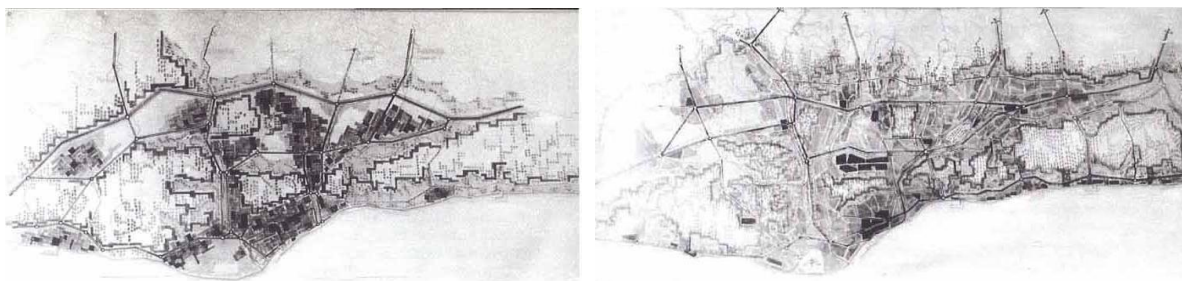
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<sup>112</sup> In the first phase the work was coordinated by J. Soteras, M. Baldrich, and J. Ros Vila, and the technical presentation was made by E. Lluch, M. Ribas, M. de Solà-Morales, and A. Serratosa among others. The second phase was coordinated by J. Soteras, A. Serratosa and M. Ribas. The Plan Comarcal group was directed by M. de Solà-Morales, the Immediate Action Plan group by Ll. Cantallops and E. Lluch, and the Infrastructures Plan by García-Rosales and A. Font.

physically separated from 5 to 10 kilometers by green and agricultural spaces (Martorell, Florensa, Martorell, 1970).

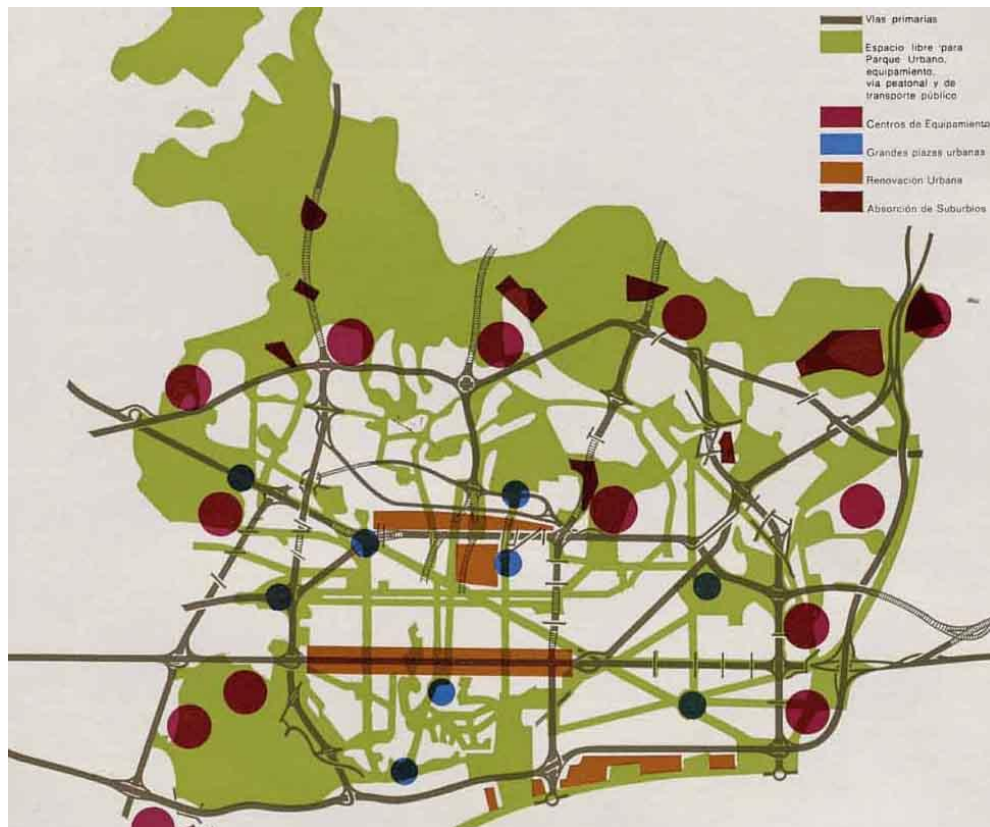
*“Esta política de recalificación, de cuño y experiencia francesa, se convertía por su magnitud y trascendencia en una de las opciones fundamentales y prioritarias del plan, visto desde la perspectiva y objetivos de la ciudad-territorio como modelo. [...]”*

*“Algunos de estos centros -los principales- tendrían un carácter directamente propulsor y económico (núcleos de concentración terciaria en los grandes aglomerados de población); otros, una especialización característica (transporte, comercio, Administración, etc.); otros, por fin, tendrían una función específica de «centros de recalificación», orientados a provocar, a través de su aportación de servicios, empleo terciario, y cualificación ambiental, una restructuración y mejora de zonas suburbanas degradadas o sub-equipadas” (Solà-Morales M., 1972: 26).*



**Fig. 210** Master Plan of the Metropolitan Area of Barcelona 1966 for the revision of the Plan Comarcal (AA.VV, 1972). And the various schematic models of the Master Plan (Torres i Capel, 1999)

In parallel, Barcelona's municipal authorities were presenting their own large-scale pro-development projects and transformation found in a leaflet 'Barcelona Año 2000' (1971)<sup>113</sup> with a prologue by Mayor Porcioles summarizing the general municipal plan's ideas of adapting the city to its new functions in a metropolitan context. It mainly presented primary and secondary roadways that divided the city into parts with Gran Via being widened and crossing vertically towards the surrounding municipalities (Teixidor, Tarragó, Brau, 1972).



**Fig. 211** The conceptual scheme presented in the leaflet 'Barcelona Año 2000' 1971. It projected a scheme of primary roads or highways that channel long distance traffic; secondary distribution channels; the current road network; and a network of pedestrian streets and public transport closely related to a system of urban parks and forests as well as equipment centers and large-scale urban squares (Teixidor, Tarragó, Brau, 1972).

However, the Master Plan's aims and proposals were but a 'Master Schemes' requiring subsequent working processes that were difficult to be carried out.

It faced many difficulties and problems including the existing physical realities not only that of the natural territory, but also the infrastructures and constructions already realized or programmed.

<sup>113</sup> The leaflet was published by the City Council in 1971 and supervised by Xavier Subías.



Before the final approval, the name “metropolitan area” was advised by the Full Council as well as the COACB<sup>114</sup> to be changed to ‘Estudio de decongestión de la Comarca de Barcelona’, particularly that the definition of ‘metropolitan area’ was unclear, and its territory extensive. According to Manuel de Solà-Morales (1972), even the idea of decongestion was somehow contradictory, ambiguous, and debatable arguing that while industrial zones were being distanced into areas like Tordera, Vallés or Panadés, which is one of the key factors to decongestion, many were being reclaimed in Barcelona like refineries and petrochemical centers. Furthermore, the plan faced legal issues with the Land Bylaw in particular and its name did not correspond to the legal types of planning established in the Bylaw.

*“La denominación Plan Director del Área Metropolitana de Barcelona, no corresponde a ninguno de los tipos legales de planeamiento establecidos por la Ley sobre Régimen del Suelo y Ordenación Urbana, puesto que plantea el concepto de Plan Director que no corresponde al de Plan General de Ordenación ya que sus determinaciones son mas esquemáticas, y establece el termino de Área Metropolitana con una amplitud que no corresponde a la aceptada usualmente. No obstante atendiendo a su naturaleza, ámbito territorial y previsión de desarrollo en sucesivos Planes Comarcales, puede considerarse que el Plan que se aprueba constituye la ordenación a nivel de Plan Provincial de un sector de la provincia”* (Martorell, Florensa, Martorell, 1970: 149).

Therefore, as per the suggestions of the Full Council and the COACB, in February 1968, the Plan was approved as a Preliminary Master Plan or as an ‘Avance del Plan de Ordenación Urbana del Area Metropolitana de Barcelona’.

However, the work on the plan could not be carried out since it faced methodological and coordination difficulties due to the fact that it was formed of multidiscipline entities and groups with proposed alternatives and each responsible of its own jurisdiction. Even the AMB itself was divided into different teams in response to the different juridical interests; City Council, Commission of Urbanism, and the Regional Diputació. This fact caused disorder and difficulties in methodologies, coordination and collaboration among all units and plans that resulted in political and administrative repercussions.

*“No es sorprendente, pues, que la evaluación de las distintas propuestas, y el compromiso final llegara por vías nebulosas. Primero, a través de enconados esfuerzos de auto-depuración de las propuestas, constriñéndose a una mutua convergencia idealizada. Después a través de inspiraciones desde las alturas políticas que sugerentemente señalaban líneas de fuerza privilegiadas. Finalmente, aceptando la incoherencia interna del Plan, la escisión entre su nivel programático (memorial) y su nivel normativo-indicativo (ordenación física), con lo cual se aceptaba fatalmente, ya desde entonces, su inoperancia”* (Solà-Morales M., 1972: 20).

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<sup>114</sup> The Commission of Urbanism consulted the C.O.A.C.B’s (Colegio Oficial de Arquitectos de Cataluña y Baleares) opinion feedback of the Plan or Decongestion Study’s scheme in 19 August 1967. Their list of suggestions can be found in VV.AA. “El Area Metropolitana de Barcelona”. *Cuadernos de arquitectura y urbanismo*. no.87, 1972, p.38

The Plan also faced regional and municipal problems on several scales and levels of planning that caused progressive degradation in its objectives and principles as Cantallops corroborated:

*“Sin embargo, los problemas que afectan al planeamiento a escala provincial o metropolitana hallarían mejor solución si en la acción directa se obrara consecuentemente con los principios y objetivos de carácter general contenidos en los Planes. La realidad es que cada escalón del planeamiento, y cada intervención concreta, suponen una degradación progresiva del contenido de estos principios”* (Cantallops, 1972: 10).

Busquets added that the contradictions and conflict of interests prevented technicians from being involved in drafting the plan and caused many to resign *“which definitively aborted any possibility of the plan being carried out”*

*“[The] work was marked by the implicit recognition of the state of urbanization of the region and of a new administrative reality that clashed with existing power structure [...]. The difficulties of coordinating so many levels of technical and institutional development made collaboration between already very distant parties even more laborious. In turn, the problems arising from political mistrust at the end of the first phase continually cast doubt on the work being carried out.* (Busquets, 2005: 327).

Despite that, the Master Plan's problems Serratosa pointed out that the AMB's situation would have been less satisfactory had the Plan not existed and the revision of the Plan Comarcal would not have been possible and would find some echo in another 20 years (Busquets, 2005).

*“Malgrat tot, el Pla Director del 1965-1968 ha tingut i té encara una força moral molt significativa. Al meu parer, la situació avui de l'àrea metropolitana, la gran, no és satisfactòria però, malgrat tot, hauria estat encara menys satisfactòria si no hagués existit el Pla Director, i, sobretot, no hagués estat possible revisar el Pla de 1953 dels 27 municipis sense aquesta referència inestimable”* (Serratosa, 1997: 12).

## Urban Social Movements

All these negative factors: unbalanced treatment of different areas of the city; along with overgrowth of poorly built housing estates without adequate urban planning; never ending speculation; loss of green public spaces; absence of public services; and social segregation left the country in an economic and industrial crisis, and endless social and urban conflicts. All this led to the appearance of social oppositions against the Plan Comarcal, the partial plans, and *“the Barcelona of Porcioles”*.<sup>115</sup>

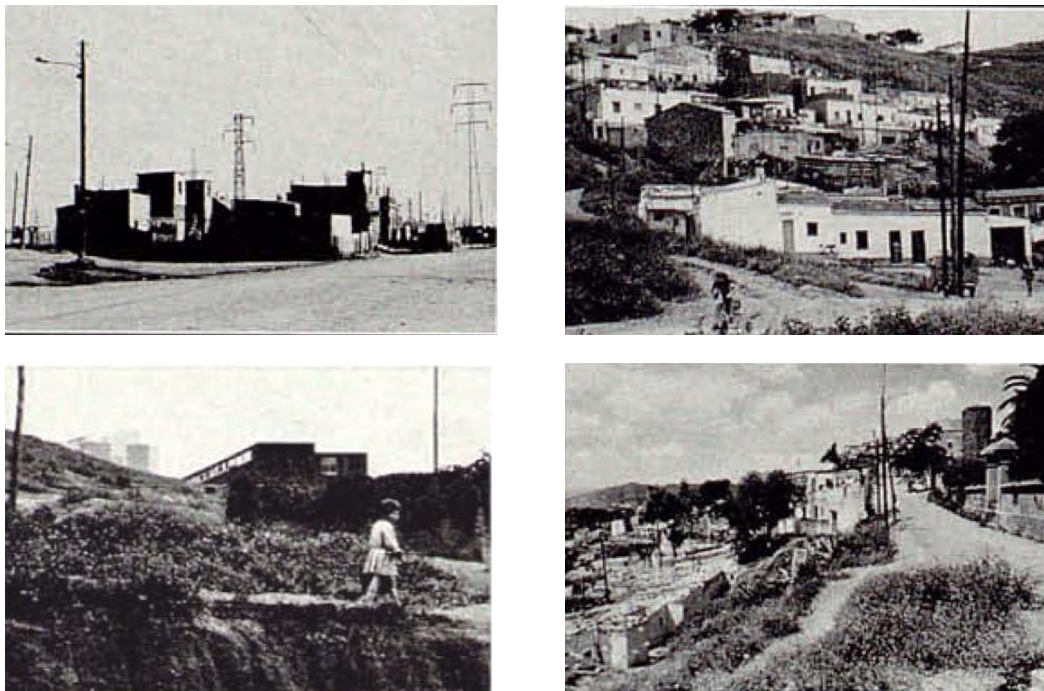
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<sup>115</sup> The era of Porcioles was called “porciolismo” as well as the “Barcelona Grisa” referring to the urban situation in the city and “the Barcelona of Porcioles” or “La Barcelona de Porcioles” was the title of the issue 21 of CAU magazine published in 1973 by J.M. Alibès, M.J. Campo, E. Giralt, J.M. Huertas Claveria, R. Paradas and S. Tarragó, which takes a critical look at this period organized in the form of a vocabulary (Busquets, 2005).

The first act of the social oppositions started with the sanctioning of the 'Ley de Asociaciones' (Associations Bylaw) in 1964 through urban social movements of 'asociaciones de vecinos' or neighbors associations that struggled to ensure the constitutional and social rights in the face of the dictatorship and governance system. They were the first collective neighborhood entity exercising democracy.

Towards 1968 they became official and consolidated through their actions although they faced a series of prohibitions and limits and were under constant monitoring by the Francoist government.

They exerted an active fight to improve the conditions of life of their neighborhood but also that of the city as a whole. Their struggle was not isolated but part of a larger, united and collective context of the whole social fabric, urban environment, and the dignity, identity, image, memory, heritage and historical value that accompanies them.



**Fig. 212** The living conditions in some of Barcelona's peripheries where some plots of land classified as Urban Parks were Occupied as in the cases above in Parc del Besòs and Vallbona (Bach, Dols, Millet, Páez, 1971) or Vacant and unurbanized as in the cases below in Turró de la Peira and Parc dels Tres Turons (Bach, Dols, Millet, Páez, 1971).

Their forms of protest included collection of signatures, assemblies, human barriers, occupation of public spaces even sequestering buses and rent strikes (Calavita, Ferrer, 2000; Naya, 1996; Huertas, Andreu, 1996). By the early 70s, they were backed up by individual intellectuals, students, clandestine politicians, organizations, and some portion of the press. And their concerns had expanded to urban planning issues "*especially areas for open space and parks, and opposition to the Partial Plans [and] the existing 1953 Comarcal Plan*

[...] that was too general and required Partial Plans and accompanying ordinances to be implemented” (Calavita, Ferrer, 2000: 798).

They played a very important social and political role in the city, they became “the catalyst of the transformation of the social relations of society [...]” demanding dignified and better quality housings, services, facilities, and open public spaces, in other words they were concerned with “everyday problems specific to particular neighborhoods; «to win a set of traffic lights, to have some running water in the houses, to have drains, asphalt, to put an end to the dust and dirt in the streets»”(Calavita, Ferrer, 2000: 797).

The pressure that the neighborhood associations exerted would be decisive in many of the urban transformations in the city.

Unlike the developments and urban “boom” in Les Corts, Sants neighborhood almost lost its public spaces and was torn apart with the new tunnels, metro, highways and cars like the I Cinturón, Avinguda Madrid and Travesera de les Corts among others. Confronting the speculation, fragmentation, degradation and slow erosion of Sants’s urban fabric the neighbors started the campaign “*Salvem Sants dia a dia...*” that took place between 1969 and 1972. They fought for recovering and reclaiming all the neighborhood’s representative spaces including **Plaça de Sants** –known during the Francoist era as Plaça de Salvador Anglada– that had lost its green physiognomy, used as a chaotic parking, and about to be divided by Travesera Industrial overpass project. “*El Plan afecta duramente a Sants. Las aperturas de viales sobre lo que tan sensibilizados están los vecinos son múltiples: Juan Güell, Numancia, continuación de Aragón, Diputación y Consejo de Ciento, sobre todo se insiste en el proyecto de continuación de la Avda. Roma en paso elevado sobre la plaza de Sants, proyecto que tanta oposición popular ha despertado en los últimos meses*” (Brau, 1974: 55). The neighbors’ protests remained determined and continued, between 1974 and 1977, with reclaiming the old industries like Can Batlló and Espanya Industiral which nowadays is a park.



**Fig. 213** Satirical caricature depicting the loss of squares in this case Plaça de Sants (Brau, 1974)



**Fig. 214** Neighbors of Sants participating in the campaign against roads and railroads (Brau, 1974)





**Fig. 215** Plaça de Salvador Anglada nowadays Plaça de Sants in 1975 newly remodeled and urbanized after the City Council keeping their promise to the neighbors and not destroying the square with the tunnel (LVG, 1975-02-01).

Similar to Sants, the I Cinturón that was causing massive destructions and expropriations gave rise to strong popular oppositions in Guinardó and Gràcia between 1970 and 1974 causing in the latter a long and complicated struggle for **Plaça Lesseps** (Fabre, Parcerisas, 2004. Art públic) that since its destruction by the beltway, and due to unsatisfied residents, had to be continually modified before taking its final shape in 2009 on the hands of architect Albert Viaplana.

Not far from Lesseps square, in Baix Guinardó, neighbors struggled to conserve the deteriorating Parc de les Aigües. After long pressures from the l'Associació de Veïns i Veïnes Joan Maragall, the parc was remodeled by Joaquim Casamor and opened to the public in 1978 along with a new square at its entrance **Plaça Alfons X el Saví** remodeled in the 80s.

In Horta, Carmel neighborhood, confrontations with the company TABASA against the Túnel de la Rovira started in 1972 after nearby dwellings were damaged and had to be evacuated. In 1974 the protestors won and were compensated.



**Fig. 216** Plaça Lesseps destroyed by the Cinturón in 1976 after being remodeled in the 60s (Unknown, 1976. AMDG)

Another struggle was in Poblenou between 1970 and 1975 where a large front was created by the neighbors and professional associations rebuking the paradigm project (Busquets, 2005) of La Ribera<sup>116</sup>, a partial plan for the eastern seafront sector. The Ribera Plan, drafted in 1965 by Pere Duran i Farell, aimed to eradicate the population along the waterfront from Barceloneta to the river Besòs –with the claim of opening the city to the sea– in order to achieve maximum capital gains since all the large industries in the area were relocating outside Barcelona. The Plan was presented in 1971 and was met with direct opposition and even challenged with a competition and counter plan<sup>117</sup> drafted by the ‘Laboratori d’Urbanisme de Barcelona’ (LUB) that finally brought the project to a halt before the waterfront and beaches were redeveloped and recovered for the 1992 Olympic Games in the democratic period. As Tatjer pointed out: *“Afortunadamente, la crisis económica de los años setenta y el importante movimiento vecinal frenarán estos intentos de renovación dura que con la llegada de los nuevos ayuntamientos surgidos a raíz de la etapa de transición política y de la democracia serán substituidos por nuevos planteamientos”* (Tatjer, 1998:20).

<sup>116</sup> More information on the competition’s counter plan and an exhaustive study and analysis of Barcelona and its seafront developments can be found in M. de Solà-Morales, J. Busquets, M. Domingo, A. Font, J.L. Gómez-Ordoñez, *Barcelona: remodelación capitalista o desarrollo urbano en el sector de la ribera oriental*, Laboratori d’Urbanisme of Barcelona, 1974.

<sup>117</sup> Ibid



**Fig. 217** General scheme of Ribera Plan in 1964 obliterating the south of Poble Nou and remodeling Barceloneta. And the Cinturón Litoral tracing the limit of the partial plan (Torres i Capel, 1999) (Solà-Morales M., Busquets et al. 1974)

Continuing in this field there was an attempt to pass the Torre Baró-Vallbona-Trinitat Partial Plan for the peripheral, self-built area north of the city which provoked a strong popular reaction and a confrontation in the City Hall in 1973. This resulted in a scandal that forced Porcioles to step down the next day as ordered by the central government in Madrid. In addition to the partial plan coming to a halt, six other neighborhoods joined in solidarity to form the “Nou Barris” association that was recognized in 1984 as one of Barcelona’s ten districts (Fabre, Huertas, 1988). Neighbors fought to reclaim their open spaces and convert them into squares like **Plaça de la Prosperitat** inaugurated in 1976 after paralyzing a housing project in the old factory of Harry Walker. Moreover, they reclaimed other green spaces in the neighborhood planting them with trees and shrubs such as what is now called Plaça Verda de la Prosperitat (1999) and Plaça Nou Pins (1999). Barcelona’s neighbors associations, in the center as well as in the periphery, gathered in 1972 to form a federation known as the ‘Federació d’Associacions de Veïns i Veïnes de Barcelona’ (FAVB) that maintained its positions and continued, and still continues, its work in the democratic era, and nowadays represents one of the city’s image and several popular struggles. Among these developments was one of the first steps towards



Barcelona's new "exceptionally advanced" plan entitled 'Plan General Metropolitana' (PGM) or General Metropolitan Plan (GMP) initially approved in 1974.

*"This episode is important as a sign of the weakening grip of Franquismo on the country, of the power of the Barcelona urban social movement, and of the expansion of its reach to include large-scale planning issues. It is within this atmosphere that the preparation of the GMP began"* (Calavita, Ferrer, 2000: 799).



**Fig. 218** Demonstration of the neighbors in Nou Barris to improve their quality of life (Manresa, 1973. AHRNB)



**Fig. 219** Neighbors of Sant Martí protesting for more green zones and less buildings (Robert, 1977. AFB)



## 5 RECONSTRUCTING BARCELONA IN THE DEMOCRATIC ERA

In the 60s and 70s, the Francoist grip was loosening and in addition to the rise of urban social movements and oppositions, Barcelona's scene had started to shift and evolve with the prominent new generation of architects and planners. They began teaming up and approaching architecture and planning in a new context continuing what the Grup R had started since the 50s, as mentioned in the previous chapter. Parallel to the chaos and repression there was an inevitable cultural awakening in the light of the new international publications the likes of Lynch (1960), Jacobs (1961), Alexander (1964), Venturi (1965), Choay (1966), Rossi (1966), and Lefèbvre (1967, 1970)<sup>118</sup> among others. They opened up to a scientific approach of urban, political and social matters in the city addressing slums, traffic or citizen participation with publications like the *Journal of the American Institute of Planners* (JAIP) or the international projects manifested in the COACB'S *Cuadernos de Arquitectura*. The new international scene had a clear affect reflected through the rise of the Escuela de Barcelona (Barcelona School); the new architecture teams like Oriol Bohigas, Jospe Martorell, and David Mackay's team MBM; and the approach towards the 'realism' style depicted in Bohigas's article "Cap a una Arquitectura Realista" (Towards a Realist Architecture) in 1962. They became influenced with the French and Italian schools particularly in Milan's metropolitan area plan the 'Piano Intercomunale Milanese' presented in the issue of *Urbanistica* journal in October 1967, which broke the traditional procedures of urban planning. Many important teams of architects were featured and had a great impact on the city, and Bohigas's work was the most accentuated during that time specifically because his theoretical principles – which rebuked the way in which Barcelona was being constructed– will serve as a base for the '*hacer ciudad*' or making of the city during the democratic era.

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<sup>118</sup> David Lynch's *The Image of the City* (1960); Jane Jacobs's *The Death and Life of Great American Cities* (1961); Christopher Alexander's *Notes on the Synthesis of Form* (1964); Robert Venturi's *Complexity and Contradiction in Architecture* (1965); Françoise Choay's *Urbanisme, Utopies et Réalités* (1966), Aldo Rossi's *La Architettura de la Città* (1966), and Henri Lefèbvre's *Le Droit a la Ville* (1967) and *La Révolution Urbaine* (1970).

All this, set ground to the beginning of change in the urban planning of Barcelona into a more reform and progressive planning.

*“D’alguna manera, a partir dels seixanta es tanca pàgina als eslògans de la Carta d’Atenes, a la ciutat funcional, però també a l’experiència organicista del Pla de Londres de P. Abercrombie, que havien pres com a model Bigador des de Madrid i Baldrich des de la Diputació de Barcelona, per buscar altres referències, i per donar noves respostes als problemes de l’època” (Pié, 1974: 24).*

The period of “transition to democracy” was very important in the history of Barcelona because it marked the end of the “franquismo”, the dictatorship and the isolationism. A cultural, political, economical and urban awakening was made possible by the weakening hold of the regime.

With no approved plans at hand, the ‘Comisión de Urbanismo de Barcelona’ proceeded with the Plan Comarcal’s revision. Further studies of the urban situation continued with the Plan Director serving as a reference. Modern scientific techniques of urban planning analysis, evaluation, simulations and mappings were applied to understand and explain the renovation process of the new plan. They were performed by the LUB and published in *Modelo de Simulación de la Comarca de Barcelona* in 1972 and, in the same year, in Manuel de Sola-Morales’s *La Ciudad y los Juegos* which were a clear reminder of the JAIP’s *Gaming Simulation for Urban Planning* published in 1966.

By 1974, a new plan was drafted officially entitled ‘Plan General de Ordenación Urbana y Territorial de la Comarca de Barcelona’ noting that the name ‘Plan General Metropolitana’ (PGM) was given for the plan’s second and definite version of 1976 (Pié, 1974). During the same year the plan was unveiled in 1974 the ‘Corporació Metropolitana de Barcelona’ (Metropolitan Corporation) was formed replacing the ‘Comisión de Urbanismo de Barcelona’ that covered the same area as the Plan Comarcal i.e. Barcelona and 26 municipalities. The plan was prepared by engineer Albert Serratosa director of the Metropolitan Corporation’s urban planning services, and coordinated by architect Joan Antoni Solans, Ricard Pié, among others. However, it received strong criticism and objections from both the popular sectors and private and property owners. At that time, Enric Masó (1973-1975), the new mayor directly appointed by the central government, attempted to get closer to problems by regularly visiting the peripheries and their degraded neighborhoods.

Still, the plan was opposed and attacked because, first, the neighborhood associations complained that not enough areas had been designated for green spaces and public use, and new road networks were going to cut through some of the historic neighborhoods like in Gràcia and Sants. Second, the private sector and property owners protested against their land being designated for public use and feared the devaluation and decrease of their property and capital gains due to reduction in speculation that had been going on since the 50s. The oppositions caused the central government to appoint a new mayor Joaquim Viola (1975-1976) who was a friend of Porcioles (Calavita, Ferrer, 2000).

Franco had died in that same year of 1975 and the opposition increased and took to the streets against the plan, its director Serratosa, and the new mayor. The FAVB organized huge demonstrations that began in February and lasted for several months, and petitions where signed against Viola (Huerta, 1997). Supported by professionals, the associations insisted on the elimination of the thoroughfares about to destroy their historic neighborhoods, the reclassification of private use areas into public use, preservation of the few remaining open spaces, and the reclamation of spaces like 'Espanya Industrial' factory, among others, that was eventually converted into a park.

The pressure of the critical situation enforced the restudy of the plan and in 1976 a new version was approved entitled 'Plan General Metropolitana' (PGM) directed by Joan Antoni Solans after which Mayor Viola resigned and was replaced by Josep María Socias (1976-1979). The neighbors associations persevered in their oppositions and demands for their basic rights and quality of life becoming an important symbol and image of social struggle and solidarity in Barcelona. This fact led Serratosa, three years later, to dedicate his book, *Objetivos y metodología de un plan metropolitana*, to the "victims of speculation" making it clear that the associations were the authentic protagonists: "*«Las asociaciones de vecinos, solas o a través de la Federación en el caso de Barcelona, fueron los auténticos protagonistas [...] para contrarrestar los ataques de los grupos de presión a lo más esencial de la Revisión»*" (Huertas, 1997: 68).

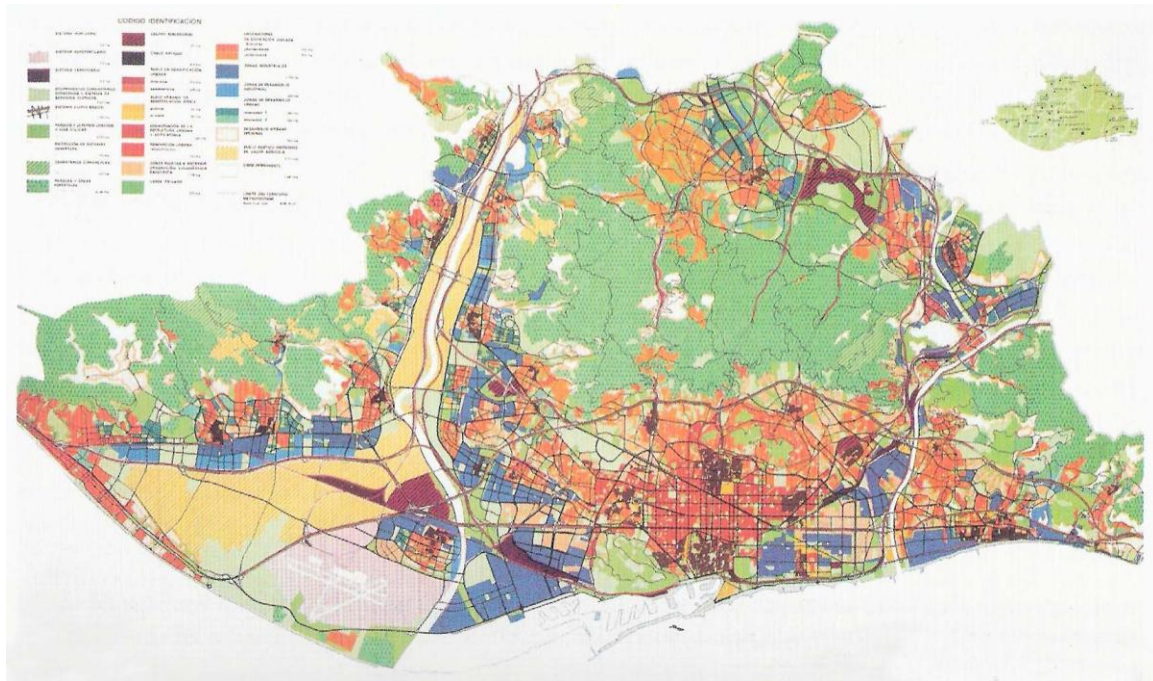


Fig. 220 Plan General Metropolitana and its zoned areas 1976 (Busquets, 2005)



The Land Bylaw, still in force since 1956, was also revised and replaced by a new reasonable structure in 1975 establishing a framework of reference upon which the PGM had to adapt.

Therefore, the plan was designed in accordance with the regulations and laws in order to reestablish a balance and restructure urban developments.

The technical team working on the plan, formed by Juli Esteban, Xavier Sust, Amador Ferrer to name a few and directed by Solans, restudied and analyzed the new version in a detailed scale of 1:5000 unlike the 1:10000 scale of the older version. They summarized and classified the collected information from in situ visits in order to verify situations and correct existing errors, even making collages and graphic synthesis as per Ferrer: *"El nou equip, en definitiva, va efectuar un laboriós treball de zoom, collage i síntesi gràfica que durà quasi dos anys, al llarg dels quals les esmenes sobre els documents anteriors van ser constants"* (Ferrer, 1997: 48).

Eventhough the same road alignments were maintained, the PGM's general objectives were (Ferrer, 1997; Solans, 1997; Esteban, 1997):

- 1- Maintaining the policy of decongestion and decentralization of a large number of industries placing them in alternative locations and creating a new balance between work and living;
- 2- Making explicit land policies to re-qualify areas, normalize land market and adjust land prices to production costs;
- 3- Reducing the built density and changing building ordinances in areas like Ciutat Vella and Eixample by lowering height limits to further enhance the relation between the facades and public spaces as well as freeing the block's interior courtyards where possible;
- 4- Containing private initiatives, differentiating between land acquired for public use and land acquired for private use dubbing the first as "systems" that served as the skeleton of the plan, and the second as "zones" that helped regulate the urban process and establish land norms and regulations in function of the public-private partnership.
- 5- Zoning and delimiting areas and lands of distinct functions and classifications where the 1:5000 scale of the plan allowed precision and accuracy in achieving the *"beneficis socials nets"* or *"òptims urbans"* (Ferrer, 1997: 49) more than the 1953 Plan Comarcal was able to;
- 6- Improving the existing urban structure and reclaiming and providing public spaces, green areas, and facilities with the objective that every neighborhood should enjoy its own park (which were made possible through the 'Planes Especiales de Reforma Interior (PERI) and two decades later with the 'Llei de Barris').

As Esteban confirmed:

*"[...] the PGM imposed on the area a new legal planning framework and to this end proposed a clear organization of public spaces or "systems"... [It] proposed a considerable*

*quantity of land to be set aside for green zones and public facilities, which entailed the removal of numerous pieces of land from the property market. As far as land for private initiatives was concerned (the “zones”) the plan worked towards containment. This was the case, first, in relation to the spread of urban sprawl into still rural areas and, second, through the substantial reduction in permitted building heights in urban areas, to avoid problems of building congestion” (Esteban, 2004: 117, 118).*

In this transition to democracy period, Josep Maria Socias played a conciliatory role between the neighborhood associations and the PGM trying to find solutions and mend the rift created. He set a new policy of buying land designated for residences to convert them to green areas and approved a ‘Plan de Urgencia’ (Urgency Plan) with the objective of achieving as per his words *“una Barcelona de Barcelones”* or *“fer ciutat”* (Fabre, Huertas, 1988: 506).

The price of land was going down due to the economic recession and scarcity of private capital which caused fears in landowners. That and the availability of necessary funds helped Solans, the planning director of the PGM, to apply the City Council’s policy and start buying land designated for parks, gardens, schools and other public facilities and organized the territories according to two concepts; spaces set aside for public or communal use and areas devoted to private use.

*“Pel PGM era molt important determinar els elements d’estructuració necessaris davant de tant desenvolupament amorf i sense consistència que havíem patit. Amb aquest objecte assenyala amb precisió els espais reservats i, fins i tot, dibuixa la naturalesa de les vies i dels espais públics d’aquests elements d’estructuració” (Solans, 1997: 97).*

In 1979 the first democratic municipal elections took place, four years after Franco’s death, with the Left wing winning. The socialist parties united and formed the ‘Pacte de Progrés’ and elected Narcís Serra (1979-1982) as the new mayor. It was the beginning of change in Barcelona’s different levels of economic, political, social and urban. However, the year 1979 was dubbed by Pasqual Maragall as *“mort”* or a dead year with the absence of new investments. But by 1980, things started to change thanks to Serra who obtained a decree from the government that made sure that stagnation will be imminent if there was no municipal participation in the state budgets (Fabre, Huerta, 1988). Meanwhile the disagreements between Joan Antoni Solans, the City Council’s delegate of Urban Planning Services, and Ricard Boix, the Urban Planning Councilor, caused Solans to eventually leave his position to become the Generalitat’s director of Urban Planning. In his turn Boix departed leaving his position to Josep-Miquel Abad whom with Mayor Serra selected Oriol Bohigas as the city’s new urban planning delegate.

With Oriol Bohigas; the newly created ‘Servicio de Proyectos Urbanos’ (also known as ‘Instituto Municipal de Proyectos Urbanos’ (IMPU)) and its director Josep A. Acebillo on one hand, and the ‘Escuela de Arquitectura’, the ‘Laboratori d’Urbanisme’ and its director Manuel de Solà-Morales on the other hand, marked the years 1979-1981 as a key change in

the City Council's urban planning and as the beginning of democratic municipal management<sup>119</sup>.

### **Recovering the City**

The democratic government had a global vision for Barcelona's development that prompted the rapid transformation based on the following measures: to develop and reconstruct the city as a whole; a social strategy that responds to the demands of the neighborhood associations as well as includes and improves citizen participation; create multifunctional projects that enhance social and use diversity; prioritize public space and equipments as a strategy of "*hacer ciudad*"; regenerate the center as well as the suburbs and periphery through the creation of public spaces of quality; use urban design, public art, and campaigns like that of 'Barcelona posa't guapa'; open the city to the sea and manage large-scale transformation projects; and to have an urban marketing strategy as an instrument to attract tourists, investors, professionals, etc. (Borja, 2010).

The large number of urban interventions carried out during the eighties and early nineties were to become known as Modelo Barcelona. A model exported to the world through the participation of architects from Barcelona in other projects of urban regeneration in Europe and elsewhere.

*"Cuando se habla del modelo Barcelona normalmente se alude a la intervención en el urbanismo [...] La idea del modelo se ha aplicado también, generalmente de forma encomiástica, a otros aspectos, como la participación o las políticas culturales, en las que se pretende que Barcelona sería también ejemplar"* (Capel, 2006).

These policies had a considerable impact both at a local and international levels, so the city was awarded Harvard's University 1990 Prince of Wales Prize in Urban Design for the quality of urban spaces built in the city. In 1999 the Royal Institute of British Architects awarded it the Gold Medal in appreciation for the urbanism developed by the administration. This focus did indeed improve the quality of life in the city:

*"lugar a una mejora considerable de la calidad de vida de las gentes y el funcionamiento de la ciudad y sus servicios. Se demostró que era posible hacer mucho y más en las zonas más abandonadas, a pesar de la escasez de recursos. [...] Se dio calidad de ciudad a los barrios periféricos y se cuidó tanto la funcionalidad como la estética"* (Borja 1995, p.10).

The starting point of the urban transformation comes from the PGM for its approach on a metropolitan scale and for keeping large areas of the city for public use, something which continued and was fruitful with the new Mayor Pasqual Maragall (1982-1997).

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<sup>119</sup> They were known as the *lapices de oro* (pencils of gold). Bohigas held his position between 1980-1984 and was succeeded by Rafael de Cáceres as director of Servicio de Proyectos y Obras until 1993 which then was occupied by Ignaci de Lecea. Bohigas stepped down to become an urbanism councilor and Acebillo left in 1988 to form the Holding Olímpico.

*“De la mateixa manera que els setze anys de Josep Maria de Porcioles a l’alcaldia (1957-1973) passaran al la historia com aquells en què Barcelona va acumular uns déficits d’equipaments esgarrifosos, la década dels vuitanta, amb Narcís Serra primer, i amb Pasquall Maragall després, haurà de ser recondeguda com un época d’esforços per disminuir una mica aquells déficits. Les mancances eren tan grans, que els resultats només han pogut ser espectaculars en alguns camps, com ara el dels espais lliures, gràcies, en bona part, a la intel·ligent política de compra de sòl que l’Ajuntament va portar a terme en temps de l’alcalde Josep Maria Socias Humber. Aquesta política d’adquisició de terrenys, que després han servit per fer-hi parcs i equipaments, va ser possible, en bona part, gràcies a la crisi econòmica i de la construcció que es vivia a la segona meitat dels anys setanta, i a la incertesa política que veien els propietaris del sòl” (Fabre, Huertas, 1988: 462).*

As Bohigas indicated, this plan allowed to act immediately and effectively as required by the moment: *“El P.G.M. és, doncs, el nostre punt de partida, és a dir, l’instrument a corregir, a millorar, a transformar, d’acord amb la seva propia predisposició a fer-ho”* (Bohigas 1983: 12).

However, despite its positive qualities and precise nature the PGM did not exhaust the city’s projects nor cover specific and limited areas particularly the ones on the scale of the neighborhoods (Esteban, 2004).

Evidently the PGM proposed a homogenization of the city: a good measure and localization of spaces and equipments, and an adequate distribution of densities. But this homogenization is generalized, quantitative, and has no specific subject-matter, which in fact, the latter could be solved by formulating an understanding of the center-periphery alternative both considered as basic and correlated categories.

In Barcelona’s urban centers, the PGM proposed the opening of new roads and axes or modifying existing ones.

And in the periphery it planned a road network –of “curves and counter-curves”, of large multi-leveled links– that does not correspond to the urban scale implanted on the already existing streets and squares lacking any “urbanitat” or urban “bones maneres” and disrupting the landscape’s harmony and continuity. They were met by protests and struggles of the neighborhood associations who were the first to react against these kinds of projects in defense of their affected neighborhoods.

Bohigas criticized the plan by arguing that nowadays the circumstances have changed and the method of opening streets and affecting alignments and volumes is no longer valid because the dynamics and systems of producing cities have dramatically changed:

*“No se puede continuar con proyectos ya centenarios como la Avenida de Las Drassanes, la calle Méndez Núñez o la Avenida Cambo o con afectaciones recientes y por tanto comprensibles como la Vía O, porque en proyecto tiene un límite cronológico muy preciso, pasado el cual se convierte solamente en un elemento de degradación. Estas vías son hoy inconstruibles por evidentes razones técnicas, económicas, sociales, políticas y de gestión y, mientras Canto, son solamente grandes gérmenes de desurbanización: el titubeo incipiente de las expropiaciones, los desahucios y las ocupaciones sin realizaciones inmediatas marcan un proceso ineludible hacia la marginación social y el desmoronamiento físico que, poco a*



*poco, se va transmetint a tot el barri. Una radiografia del Raval, de Sta. Caterina o de Gràcia marca sin duda las zonas más oscuras y degradables, coincidiendo con Los fantasmagóricos trazados de la avenida de las Drassanes, de la Avenida Cambo y de la Vía O” (Bohigas, 1983: 13).*

Therefore, the projects were realized within special plans for interior reforms ‘Plans Especials de Reforma Interior’ (PERI) developed for each of the neighborhoods, along with specific projects located within the area of influence of each of these PERI, which mainly prioritized interventions in public spaces and equipment to regenerate their surroundings:

*“actuar directament en l’espai públic i actuar-hi amb la doble intenció de fer-ne un equipament de qualitat i convertir-lo en un punt de transformacions espontànies. És evident que quan en un barri degradat o no conformat urbanament hom reconstrueix - o construeix- un espai públic, aquest actua com un spot exemplar, com motor d’una regeneració de l’entorn sota la iniciativa dels propis usuaris, provocant fins i tot un nou equilibri de la demografia” (Bohigas 1983: 16).*

As Esteban pointed out: *“The period in which the PERIs were most important in municipal policy, especially in the process of drawing up projects and in public debate, was between 1980 and 1986”* (Esteban, 2004: 119). During the preparation for the Olympic Games between 1987 and 1991, to compensate for the large-scale projects of infrastructure and road system taking place in the city, the city continued its small-scale interventions and approved 20 more PERIs (Ajuntament de Barcelona, 1992).

They were defined by the 1975 Land Bylaw and according to Esteban they were *“un instrument de l’urbanisme «real» enfront de l’urbanisme burocràtic de xifres, standards i també afectacions”* (Esteban, 1997: 73) becoming:

- 1- First and foremost a means of asserting the particularity of the neighborhood in face of the PGM’s generality.
- 2- A tool that could channel the neighbors’ claims concerning green spaces, facilities, and conservation of significant spaces or buildings not considered by the PGM.
- 3- And an instrument of opposition against certain elements, mainly roads, proposed or conserved by the PGM.

Under the pressure of the neighborhood associations, these plans were elaborated in historic neighborhoods of the city such as, Raval, Santa Caterina, Barceloneta, Gràcia, Sants, and in the periphery such as Sant Andreu, Torre Baró, Vallbona, Prosperitat, Roquetes, among many others (Font, 2000).

Each PERI had alternately one or more intentions depending on whether it dealt, for example, with Raval area in the old town or Vallbona in the periphery.

Precisely the PERI were obliged by the PGM to develop the zoning of 14 *“de remodelació”* and 16 *“renovació urbana”* assigned by the Plan over large parts of the neighborhoods. This has required a remarkable planning effort that has been used to adjust some of the PGM’s

determinations, as well as the development of other special plans that gave a correct land management and allowed immediate building (Ajuntament de Barcelona, 1987).

PERI	Plans and projects	Documents Plans up to 1992	The second renewal
<i>Ciutat Vella</i>			
• Raval	•	•	
• Sector Oriental	•	•	
• Barceloneta	•	•	
Plans for the Passeig de la Zona Franca	•	•	
<i>Traditional neighbourhoods</i>			
• Gràcia			
- First, more ambitious version	•		
- Second, version of action units	•		
• Sants Hostafrancs	•	•	
• El Vapor Vell		•	
• Poble Sec		•	
• Sant Andreu (studies not approved)		•	
• Horta		•	
• Prosperitat		•	
Plans for the Carmel	•	•	
<i>Self-construction neighbourhoods</i>			
• Torre Baró	•		
• Vallbona		•	
• Roquetes		•	
• Can Caralleu		•	
• San Genís		•	
<i>Latest neighbourhood plans</i>			
• Porta			•
• La Clota			•
• Trinitat Vella			•

**Fig. 221** A sample of the different PERIs in different periods (Esteban, 2004)

The PERI performed specific planning and improvement actions in the urban fabric with the creation of new roads, squares, parks and public facilities that were part of the City Council's objectives. These projects were easily developed with the help of the PERIs more than with the PGM. They were short-term, small-scale instruments of real planning that translated the uniform decisions of the long-term, large-scale PGM to the specific conditions of each area and the uniqueness of each neighborhood. They were the means through which neighborhoods could oppose the PGM and attain their demands especially for green areas, public facilities and the conservation of spaces not considered by the PGM. They were closer to the citizens and the general public and they have always been means to show specific planning objectives in the spaces concerned, whether to assess, implement, or change them.

Each PERI proposal has been varied depending on the conditions of each area, the feasibility of the project and the resources employed in each. The enrichment of planning and the improvement in the viability of these proposals represented an undeniable advance in the city's overall project. Some of them were executed, some will be executed and some were reconsidered. We should not forget that their implementation, especially those that affected the urban fabric, frequently required time and successive planning attempts (Esteban, 2004).

*"Aquests significats –força concurrents en molts casos– atorgava als PERI un paper de defensa dels valors espacialment més immediats i dels objectius més pròxims en el temps, enfront de l'amplitud i la intemporalitat del PGM. Per aquesta raó els PERI es van desenvolupar en molts llocs on el PGM no els preveia; això es va fer a vegades a demanda de les associacions de veïns, que percebien que un barri sense PERI seria un barri oblidat o desvalgut enfront a un pla general massa general" (Esteban, 1997: 73).*

### **Small-scale Public Spaces Strategy**

After investing in basic equipments, and restructuring the industrial system in the area<sup>120</sup>, the government moved to the progressive politics of public spaces in the direction of what Antonio Font (2000) calls "*urbanismo remedial*", referring by that to the late 70s and early 80s democratic restoration and the attempt to resolve the deficits of our inherited city. The process of "making city" at that time had three processes: subdivision, urbanization and construction, whereas during Franco's time it was only based on subdivision, and construction (Remesar, Grandas, 2005). Remesar stated that in the peripheries, Font's "remedial urbanism" simply consisted in "*poner la calle*", "*poner la plaza*", "*poner el jardín*", "*poner el parque*", and in the historical centers it took a surgical character of "*esponjar el centro y valorarlo como el territorio simbólico por excelencia de todos los ciudadanos*" (Remesar, 2008: 99).

Font also called this period as the "*nuevo urbanismo*" or the "*urbanismo urbano*":

*"En el inicio, su preocupación primordial por la resolución de las carencias de la ciudad hace que denominemos los planes como remediales, correctores de los déficits en los elementos de carácter público o colectivo recomponiendo, así, la ordenación urbana [...] Bastante de los planes remediales se quedan en ejercicios contables sobre las necesidades en términos de zonas verdes y equipamientos, de la ciudad o de cada uno de sus barrios, luego traducidas en reservas de suelo para satisfacer a aquellos requerimientos derivados de los estándares vigentes" (Font, 2000: 67).*

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<sup>120</sup> On the industrial level, there was a global restructuring of the industrial system in the Metropolitan Area initiated by the Zona d'Urgent Reindustrializació ZUR (urgent reindustrialization area) converted into the 'Pla de reindustrializació del centre de Barcelona'. This restructuring was based on factors such as R+D (research and development) and other new technologies which became the new profile for industrial development. The rivers Llobregat and Besòs were joined with the other side of the Collserola (Vallès corridor, Vallvidrera tunnel) connecting the city to important industrial cities such as Sabadell, Terrasa, Sant Cugat, Vallès and Vallvidrera (Busquets, 2005).

Considering the first few years of the 80s, between 1981 and 1987, the ‘reconstrucción’ (Bohigas, 1985, 1986) of Barcelona began mainly by creating a series of small-scale projects and the process was not to create a new model but to fix it with “*reparaciones urbanísticas*” in all the neighborhoods according to the policy “*funcionalizar el centro y escultulizar la periferia*” (Acebillo, 1999: 225) or “*higienizar los barrios viejos y monumentalizar la ciudad nueva*” (Bohigas, 1986: 27).

It was a method of “*hacer ciudad*”:

*“[...] el centro histórico -que mantiene la capacidad de representar la escena urbana- ha caído en una degradación higiénica que lo hace inhabitable; la periferia -que a veces es soporte de una mejor calidad residencial- no tiene ninguna definición urbana. Hacer ciudad quiere decir, por tanto, higienizar los barrios viejos y «monumentalizar» la ciudad nueva” (Bohigas, 1986: 27).*

What is meant by this policy is to rehabilitate the center; restore the architectonic heritage; achieve balanced uses and densities; and ‘*higienizar*’ it with the purpose of reconverting it into a habitable place and good residential recipient that avoids displacement and exile to non-urban areas. In other words, to return an urban quality that has been partially lost:

*“Los diversos centros históricos del aglomerado barcelonés tienen muchos problemas y a menudo están más maltratados que algunos suburbios. [...] han degenerado formal y socialmente. A menudo se mantienen solamente como «escenas» y no como marco habitable. Para que vayan adelante y recuperen la plenitud urbana hay que higienizarlos y equilibrar usos y densidades, sin que pierdan su carácter. Las acciones en el espacio público tendrían que ir en este sentido: el esponjamiento, la recuperación de la dignidad formal que ayuda a mejorar la conciencia colectiva, la rehabilitación de la vivienda antigua y el patrimonio arquitectónico que realmente sean recuperables, sin adoptar exageraciones demagógicas en zonas donde el derribo es ya un hecho irreversible. Es decir, devolver una cualidad urbana que en parte se ha perdido” (Bohigas, 1983: 15).*

As for ‘*monumentalizar*’ the periphery meant doing everything possible to urbanize them not only by drawing functional roads but also by creating public spaces as well as introducing the fundamental criteria of centrality and urban requalification. In other words provide them with urban quality that they had never acquired:

*“En la periferia hay [...] otro tipo de problemas seguramente solubles a otra escala o con otros instrumentos más director. Pero los espacios públicos de los barrios nuevos y la arquitectura que los rodea y que los debía haber configurado no han tenido nunca carácter urbano. Es necesario, pues, reordenar, urbanizar estos espacios -«monumentalizarlos» en el sentido que el término ha adquirido ya en las propuestas más progresivas dentro de la disciplina del urbanismo- con criterios de centralidad, dándoles los valores significativos de la colectividad, aquellos valores que tienen en la Ciudad histórica. Es decir, darles la cualidad urbana que nunca han tenido” (Bohigas, 1983: 15).*



Oriol Bohigas started planning and designing the new acquired lands providing them with many public facilities and spaces especially parks and squares. To respond to the citizens' demands, he started working from general to particular, from fastest to cheapest and from master plan to local and small-scale projects *"urban improvements in the form of numerous small schemes for squares and parks, leading to a far more complex urban development program [...] centering on obsolete or abandoned spaces..."* (Busquetes, 2005: 343). At the School of Architecture, the 'Laboratorio de Urbanismo' directed by Manuel de Solà-Morales, had put forward analysis and methodological systems and actions to be implemented in the city. *"It was at this juncture, when many of the needs of the neighborhoods were taken care of, that the city could turn its energy to solving its citywide needs..."* (Calavita, Ferrer, 2000: 794).

And through the 'proyecto urbano' Bohigas stated that due to its flexible nature there was no need to project the whole city but only those parts that can be more or less immediately performed: *"Mediante el proyecto urbano y con los grandes temas como elementos autónomos, puede alcanzarse una concepción global de la ciudad que sea, al mismo tiempo, muy flexible en la programación, puesto que no hay necesidad de proyectar toda la ciudad, sino simplemente aquellas partes que pueden ser realizadas de manera más o menos inmediata"* (Bohigas, 1999: 201).

To Bohigas, sanitizing the city by creating small public spaces through selective destructions is necessary but rejected the opening of new streets:

*"La higienización a través de la creación de espacios, ampliando los existentes, reagrupándolos o creando otros nuevos, con el derribo de las áreas en peores condiciones, es la contrapropuesta de la posible higienización promovida por la abertura de nuevas vías. La primera contrapropuesta que se planteó en Barcelona en este sentido fue precisamente la del GATCPAC en el Plan Maciá"* (Bohigas, 1986:40).

Small-scale squares were created simultaneously in the center as well as in the periphery, and the existing ones were renovated. And in 'Plans i Projects per a Barcelona 1981-1982', published in 1983, Bohigas demonstrated the new projects that were being created or being planned for the future. He described their process as an *"urbanismo metastatic"* explaining that the small-scale public spaces are all strategically selected in areas where reconstruction and reinforcement are needed. And when they are created they caused a kind of ripple or *"catalytic"*<sup>121</sup> (Frampton, 2003) effect that stimulates the whole

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<sup>121</sup> What Kenneth Frampton means by *"catalytic city"* is: *"I will not belabour the argument with further dispiriting accounts of late-modern urbanism, save in so far as it becomes necessary to touch on certain past paradigms in order to give some indication as to what I intend by evoking a potentially effective interplay between global strategy and local intervention and thus, in passing, to focus on the varying implications one might attach to the term the catalytic city. In fact, the Greek word catalysis is highly ambiguous; for while in chemistry it alludes to the presence of an essential inducing substance that in a reaction undergoes no change, in its original sense it meant dissolution and destruction. On the one hand, then, it may be used metaphorically to allude to an intervention whose effects extend beyond its own corporeal boundary; on the other, it implies, by etymological association, the notion of ruination"* (Frampton, 2003: 74).

surroundings. Bohigas gives an example that creating a square in a historic center could stimulate and contaminate the square's surroundings, a metastasis, and will immediately have a positive effect on the residents, businesses and commerce in its neighborhood (Bohigas, 1999).

*"Another point of departure that all European cities have had to come to accept is the replacement of the old idea of everlasting expansion and development by the new needs and new activity of reconstruction. The most immediate and obvious objectives now are to build where it is already built-up, improve, transform, modify, rehabilitate and give new meanings to existing buildings, while reinforcing or creating a sense of identity. It is a matter, therefore, of strategic, reconstructional planning by metastasization, based in the main on the organization of public space because it is the most immediately effective method of pursuing these aims" (Bohigas, 1987: 12).*

Attributing a medical and unfortunate word to an urban context, Bohigas defined it as *"the transfer of a bodily function, pain or disease, originally fairly well-established in one part or organ, to another" [And] For metastasis to be effective and positive, [in the urban context of course], the initial «infection» must be injected at the nerve centres and most important points in the districts, city or metropolis" (Bohigas, 1987: 11, 12).*

Acebillo described them as *"[...] una técnica de acupuntura), que regeneraron los barrios y devolvieron la imagen que el espacio público de Barcelona había perdido" (Acebillo, 1999: 225).*

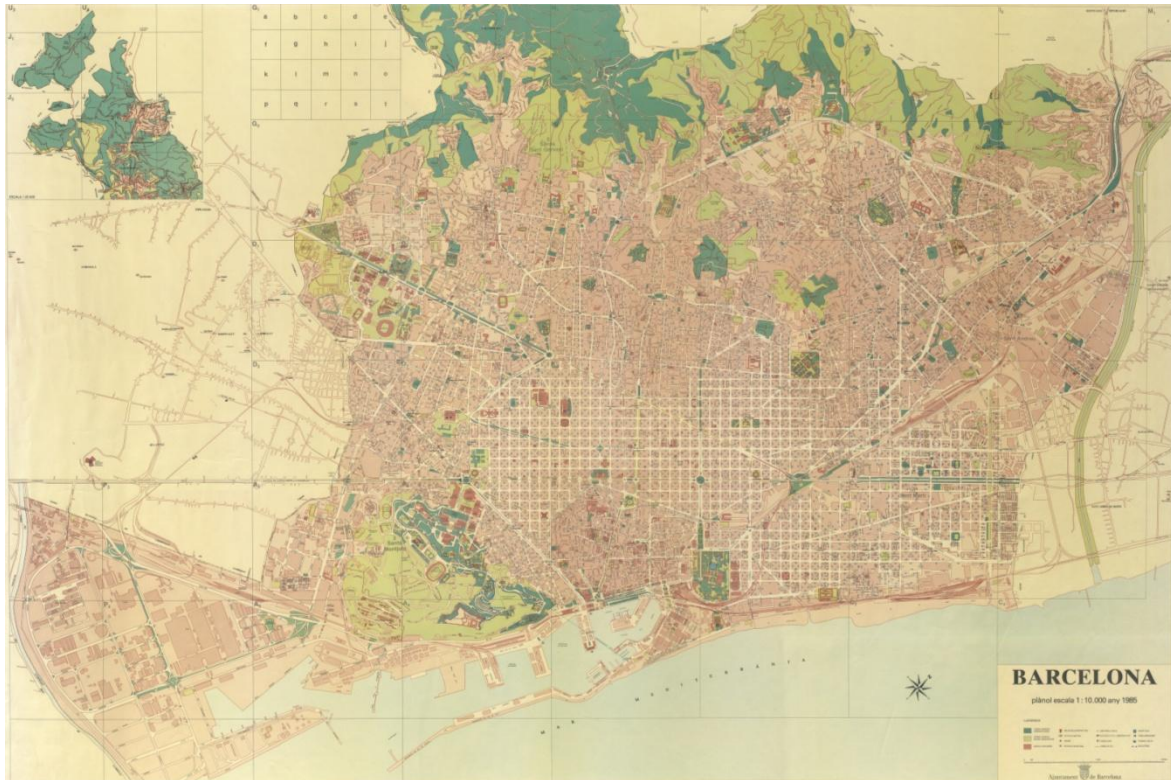
The degradation was reduced by means of strategies that combined opening public spaces with multiple acupuncture in the most critical points that combined actions to renovate housing blocks, facilities, promote businesses, and prevent insecurities as Borja (1995) asserted. Another medical word attributed to public space and urban development used and applied by many others like architect Macro Casagrande (2010), former Mayor of Curitiba Brasil Jaime Lerner (2003), and including Manuel de Solà-Morales where he pointed out that:

*"según la antigua medicina oriental, la acupuntura entiende la piel del cuerpo humano como el principal sistema portador de energía. Los 361 puntos sensibles, distribuidos por la superficie del cuerpo, transmiten, a través de 12 meridianos o vasos, sus impresiones al resto del organismo (exterior o interior). También la piel urbana –'la epidermis de la tierra' que estudiaba Jean Tricart- canaliza energía cualitativa. Y, si en la acupuntura se habla de energía 'fría' y 'caliente', también las cualidades en la epidermis urbana son sordas o agudas, mentales o sensoriales. Como en la acupuntura terapéutica, la localización del punto sensible es el primer paso para el tratamiento estratégico de la piel urbana. El acierto en la identificación del lugar y de los canales de influencia en el tejido permitirá aportar una cualidad nueva, añadir la energía adecuada, fría o caliente, potenciar la urbanidad en sus diversos modos" (Solà-Morales M., 2008: 24).*

He added that just like for acupuncture experts, the skin is not a cover for the interior but its the organism's principle sturcture, so is the urban fabric for the city. And to act with punctures, pressures and injections is to distribute energy throughout the skin or fabric.

They are all different words used to express the same procedure initiated by Bohigas to recover Barcelona's urban fabric in the center and the peripheries.

Càceres argued that *"Teoritzar esta estrategia fue necesario. Hacía falta empezar a resolver muchas demandas concretas de urbanización. Un cierto urbanismo de oportunidad era obligado, dado el momento de crisis económica y el desplazamiento o desaparición de empresas industriales o de servicios que permitieron la recuperación de espacios públicos importantes para la ciudad..."* (Càceres, 1993: 14).

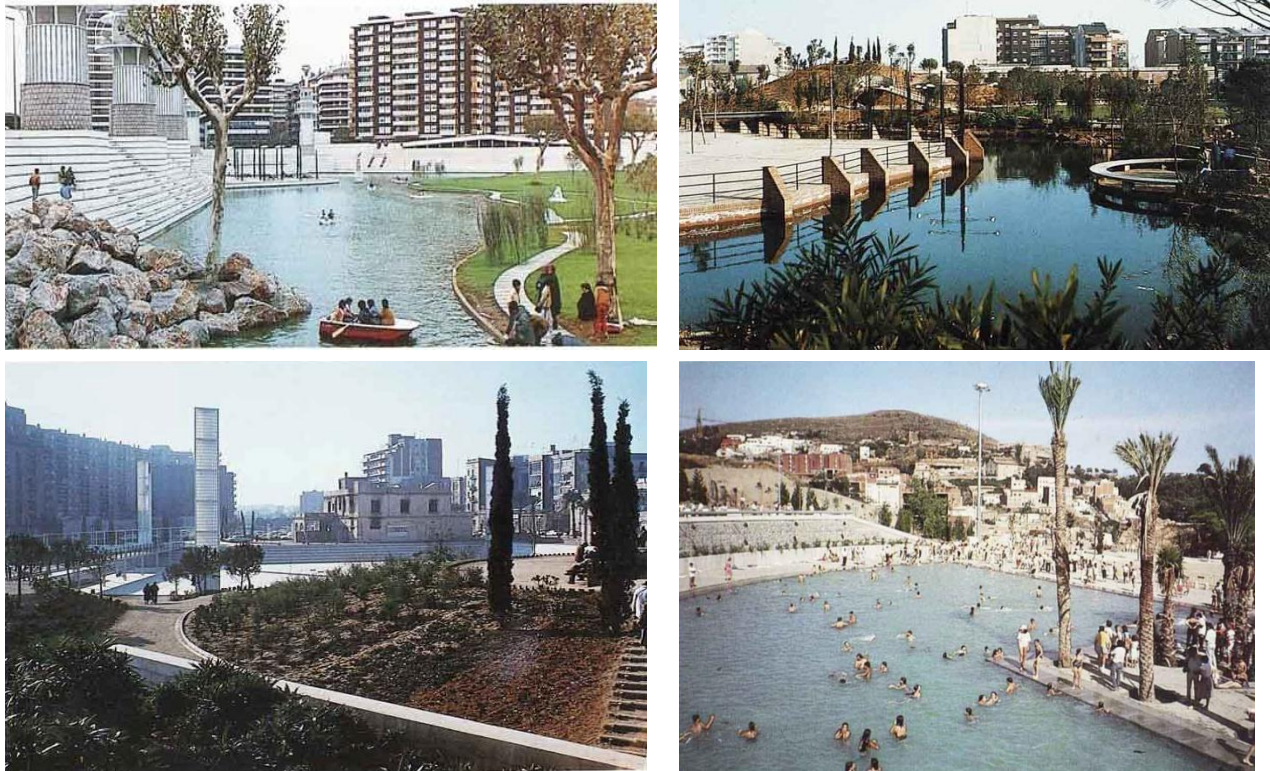


**Fig. 222** Plan of Barcelona in 1985 (Ajuntament de Barcelona, 1985. AHCB)

From the early small-scale squares, Bohigas (1983) highlighted a few created with PERIs in Ciutat Vella like Plaça Salvador Seguí (1982), Plaça de la Mercè (1983), and Plaça Emili Vendrell, and in the peripheries squares like Plaça de les Navas (1982), Plaça Sóller (1983), Plaça de la Palmera (1985), as well as the renovation and remodeling of the historic squares like in Gràcia or Sarrià. However, it is important to mention the first series of urban parks created along the small-scale squares. Though of larger scale and their creation process was relatively slow, they form an essential part in structuring the urban fabric and constitute *"un pulmón importante"* (Farrando, 1993: 90). They were created by reusing residual spaces and industrial and service plots such as Parc Can Sabaté (1984), Parc Espanya Industrial (1985), Parc del Clot (1986), Parc de Pegaso (1986), Parc de la Creuta del Coll (1986), and Parc de Joan Miró (1985). As well as the urban axes that were



remodeled to prioritize the pedestrian access. They were linear, acted as connectors between roads and public transport system and contained private businesses, commerce and parking, such as, Passeig Picasso (1983), Avinguda Gaudí (1985), Avinguda Reina Maria Cristina (1985), Via Júlia (1986), and Moll de Bosch i Alsina (Moll de la Fusta) (1987) to name a few.



**Fig. 223** Parc Espanya Industrial, Parc de Pegaso, Parc del Clot and Par de la Creuta del Coll (Ajuntament de Barcelona, 1987)

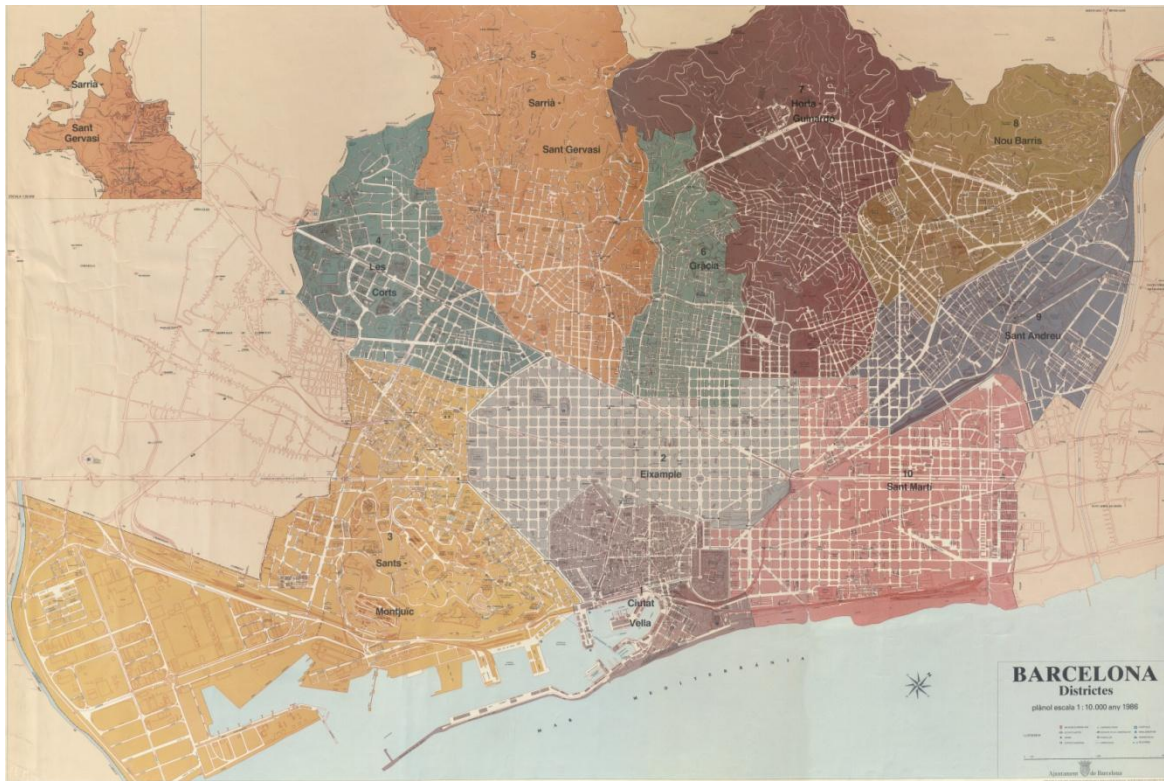
During those years, several important events determined the urban development of Barcelona.

First, in 1984, it involved an administrative reorganization of the city territory into new municipal districts and a political decentralization into 10 new districts; Ciutat Vella, Eixample, Sants- Montjuïc, Les Corts, Sarrià-Sant Gervasi, Gràcia, Horta-Guinardó, Nou Barris, Sant Martí and Sant Andreu. In return this allowed an integral action of neighborhoods and brought citizens, especially in the peripheries, closer to the administration and municipal politics.

One year later followed the dissolution of the territorial institution 'Corporació Metropolitana de Barcelona' (constituted in 1974) by the Generalitat, and was substituted by a series of consortiums that acted on the same level and undertook urban services such as water, drainage, transport and waste disposal. Busquets pointed out that: *"Despite these new imbalances, the municipal structure, organized in the form of consortiums or manocomunitats,*



and the Generalitat had to establish one or various frameworks for much needed political and administrative coordination” (Busquets, 2005: 347).



**Fig. 224** The 10 districts of Barcelona in 1984 (Ajuntament de Barcelona, 1986. AHCB)

Second, in 1986, Barcelona was selected to host the Olympic Games in 1992 which became the main catalyst for urban and infrastructure projects that the city had needed since the 1960s.

Pasqual Maragall presided over the Olympics’ organizing committee ‘Comité Organizador Olímpico Barcelona’ (COOB’92) in 1988 that started subsequently providing the city the infrastructure needed. From then on, and parallel to the small-scale projects, there was a shift in scale into large projects and developments of infrastructure, facilities, and public spaces.

At the same time new central areas or “*àrees de nova centralitat*” were created to attract economic activity and improve quality of life at the neighborhood level.

Twelve areas of centrality were proposed in 1987, into which entered the four Olympic areas or rings; Montjuïc, Diagonal, Vall d’Hebron, and Vila Olímpica that were strategic points undergoing radical preparations and transformations for the Olympic games.



**Fig. 225** New central areas: 1. Diagonal-Sarrià 2. Carrer Tarragona 3. Sagrera-Sant Andreu 4. Plaça Cerdà 5. Vila Olímpica 6. Port Vell 7. Plaça de les Glòries 8. Vall d'Hebron 9. RENFE-Meridiana 10. Diagonal Mar 11. Diagonal-Zona Universitaria 12. Montjuïc (Ajuntament de Barcelona, 1992)

From this moment, through the 'Serveis Tècnics Municipals de l'Àrea d'Urbanisme' the City Council continued with the projects as in the previous phase, but the scale of the projects took an even larger form "[...] *l'Ajuntament continua amb intervencions sobre els sistemes locals, en la mateixa línia que en la fase anterior, però al mateix temps s'inicia un nou discurs sobre projectes de gran escala i, especialment, amb intervencions sobre sistemes generals*" (Acebillo, 1993: 110).

The necessary preparations for the Olympics began by developing the four Olympic rings as well in the rest of the new centers. One of the first was opening the city to the sea which until then was occupied by industries, slums, and railway lines. Through the PERIs, the port was rehabilitated, the sewer system was restudied, and the beaches were transformed into new and clean ones with seafront promenades. Moreover, Poblenou's sea sector was restructured and the creation of Vila Olímpica and Avinguda Icària began by the MBM team. After two years of preparations and negotiating with the inhabitants, expropriations of the site began in 1988 with the demolition of residential buildings and industries that were replaced with a new port, clean beaches, new luxurious housings, parks, and public and private facilities and equipments that were ready by 1992.

The western side of Montjuïc was prepared for the Olympics and installed with new stadiums, parks and projects. In Vall d'Hebron residential lands were retrieved for use as a large park with facilities. The prolongation of the Diagonal towards Poblenou was also



developed and its upper side, in Zona Universitaria, was converted into the city's large sport area with international hotels and housings. And many other numerous existing sports installations were incorporated into the Games' program.

*"The planning in this area was characterized by a vanguardist model that proposed new regulations and even tested new materials for the treatment of urban space. The inclusion of new public facilities...and the provision of various well-placed sculptures in these new urban spaces was a clear example of the integration of the periphery by means of actions that can be understood as included in the concept of monumentalization" (Esteban, 2004: 124).*



**Fig. 226** Aerial view of the Vila Olímpica and Poblenou before and after its development (Fiol, 1190) (Todó, 1990-2000. AMDCV)

As for the rest of the new central areas, they were developed with new housings, infrastructure, parks, hotels and facilities. As a matter of fact, activities, infrastructure and strategic facilities played an important role in determining centrality and a better connected city. They sought in enhancing the business and tertiary sectors, and boosting commerce and leisure activities in their surroundings, and most importantly aimed at decongesting and reducing the pressure off the center, mainly Ciutat Vella and Eixample. However, some centers like Sagrera-Sant Andreu, and Diagonal Mar were still under study back then and their development began in the post-Olympic era.

The city also witnessed a large improvement in its road networks and accessibility like the Gran Via, Diagonal, Meridiana, Av. República Argentina, as well as restructuring the ring roads and junctions. New urban axes were developed or rearranged such as Rambla Prim (1989), Rambla de Catalunya (1990), and Rambla del Poblenou (1991). On main roads and local streets public transportation, tertiary and advertising activities were organized and many, mainly in the historic centers, were converted to pedestrian streets.

The projects of the Olympics were developed in light of the needs of the city: *"todas estas operaciones se justificaban como necesarias para los JJ.OO. y se consideraban indispensables para después del 92"* (Borja, 1995: 17).



Fig. 227 Aerial view of the city from the Olympic ring in Montjuïc (Fiol, 1990)

According to Càceres,—who became the new director of ‘Servicio de Proyectos y Obras’ after Bohigas—during those preparations Barcelona gained a high quantitative amount of green spaces and parks:

*“Desde 1982 hasta 1992 se habrán recuperando más de doscientas hectáreas de parques, de la cuales ciento diez corresponden a la operación olímpica. La importancia de esta recuperación se expresa de una manera clara al compararla con las cifras originadas en otros periodos de tiempo en la ciudad. Entre las dos Exposiciones Universales, Barcelona urbanizo doscientas treinta y cuatro hectáreas, de las que ciento noventa y tres corresponden al Parc de la Ciutadella (31 hectáreas, 1888) y al Parc de Montjuïc (161 hectáreas, 1929), Durante el franquismo Barcelona recupero setenta hectáreas” (Càceres, 1993: 15)*

Despite the shift in the scale of projects, creating small-scale squares in the city did not halt but on the contrary they were deployed in the development of the city for the Olympics.

In spite of the large number of interventions carried out in this period, there is a perceived unity and balance in the design of these public spaces, due to their method of approximation to the common project, mainly via physical characteristics and materials such as pavement, street lights, urban furniture, urban elements, signs, and design and technical details as described by Ignasi de Solà-Morales:

*“Els llocs urbans són molt distints i fins i tot el caràcter dels espais respon a una demanda de funcions tan diferents com són places, jardins, carrers i passeigs. Però, malgrat tot, la unitat de mètode amb la qual s’enfronten aquests programes reflecteix un mateix tipus d’aproximació a la problemàtica del disseny urbà” (Sola-Morales I., 1987: 14).*

In their physical characteristics, the small-scale squares were principally identified with “Les places dures de Barcelona” (Acebillo, 1993), that is “hard squares”, due to their lack of greenery, grass, and shrubs —contrary to what is strictly known as a garden— and



characterized with their pavements complemented with few elements like some trees, benches, street lights, public art, and technical elements *“aquest nom no era pas inadequate, perquè cal tenir en compte que, en la majoria dels casos, era bàsicament un exercici de pavimentació”* (Acebillo, 1993: 107).

And Farrando added that:

*“[...] la plaza [...] encontrara muchas ocasiones para materializarse en Barcelona, el jardín, en el sentido más estricto del término, se concretaba en muy pocas realizaciones. La mayor parte de intervenciones que podrían relacionarse con él se acercan más a aquella tipología intermedia entre el jardín y el parque urbano que al jardín propiamente dicho”* (Farrando, 1993: 90).

However, in this new phase –and after the inhabitants claiming for spaces where greenery played a more important role– newly created squares evolved into what is known as “plaza-jardín” or “square-garden” in which the green element is more present. They are not hard squares nor gardens but a mixture of both that enriched Barcelona’s public spaces, such as Jardins de la Industria (1990), Jardins del Dr. Hahnemann (1990), or even the renewed squares Plaça Dr. Serrat (1989) and Plaça del Sol de Baix (1989).

Lecea pointed out that perhaps the “square garden” have been the starting point for setting up the new images of nature, filtered by the contemporary culture, that have appeared in the projects of gardens as of 1992 such as the set of projects deployed by the ‘Servicio de Proyectos y Obras’ like Jardins d’Olga Sacharrof (1994) in Les Corts, and Jardins Joan Vinyoli (1998) in Sarrià, among others:

*“Estas bases proyectuales se estructuran según leyes diferentes, en ordenes complementarios y yuxtapuestos: topografía, pavimento, vegetación -en grandes masas tapizantes, arbustos y arbolado-, y elementos de iluminación, configurando todos ellos una nueva complejidad sin referentes inmediatos en la tradición”* (Lecea, 1999: 109).

However, they did not replace hard squares or parks but complemented them:

*“Poco a poco, surgen en Barcelona plazas donde el elemento vegetal, anteriormente circunscrito a los parques, adquiere un papel más importante. [...] Pero todo esto no debe hacernos creer que todo el espacio público creado últimamente tiene forzosamente estas características. Lo que podríamos denominar plaza-jardín no substituye a ninguno de los tipos anteriores sino que los complementa. La evolución de la ciudad ha encontrado, sencillamente, la manera de introducir un nuevo modelo de espacio que antes no era factible”* (Farrando, 1993: 94-96).



Plaça de los Països Catalans in Sants created in 1983 as a hard square by A. Viaplana, H. Piñón (Author, 2010)



Plaça Sol de baix in Les Corts remodeled in 1989 as a square garden by R. Marqués (Author, 2017)



**Fig. 228** Jardins d'Olga Saccharrof created in 1994 by M. Gabàs and C. Casamor (Author, 2010)

In both types, squares and square-gardens, a special care was paid to the aesthetic of their design, materials, and urban furniture and this is what made them spaces of quality, modernity and innovation (Quintana, 1993). And despite the common character of urban elements, Barcelona's urban furniture is a conglomeration of elements with a great variety of designs but with a disparity of selection criteria as Quintana (1993) explained. Therefore, after ten years of creating public spaces, the 'Servicio de Elementos Urbanos' was created in 1991 within the 'Servicio de Proyectos y Obras' in order to select and organize the city's large variety of designs and urban furniture. Quintana added that: "No

*solo queremos realizar nuevos diseños, sino que también pretendemos desarrollar los criterios de selección, colocación, normalización y renovación” (Quintana, 1993: 188).*

*“[...] se trata, pues, de hacer un urbanismo con los instrumentos de obra pública, es decir, un urbanismo que se apoye en los proyectos de urbanización. Proyectar, una vez más –y realizar–, plazas, calles, paseos, parques, ramblas, encrucijadas, pasos de peatones, mobiliario urbano, señalización, monumentos.”(Bohigas, 1986: 19).*

Moreover, public art played an important role in the creation of public spaces particularly during the preparation for the Olympic Games. The majority of Barcelona’s public spaces, whether small or large, contained public art and works of sculpture that were considered as elements of the town planning projects commissioned by the city of Barcelona. The planned integration of contemporary sculpture into the fabric of the city is not merely unusual, but unique. As part of the Barcelona model, *“one outcome of the design of new spaces was the improvement of many neighborhoods, but even more important was the creation of prestigious spaces, thanks to their architectural design and the use of street sculptures” (Benach, 2004: 153).*

As Remesar and Ricart pointed out, public art *“trasciende la idea de escultura conmemorativa o monumento, para significar ‘el arte de hacer ciudad’ ” (Remesar, Ricart, 2010).*

They affected these public spaces in that:

*“se intenta recuperar el valor de los espacios urbanos a través del arte, crear lugares para la ciudadanía, que amortigüen las agresiones del urbanismo duro moderno y aporten espacios vivibles. Con ese propósito se impulsan proyectos técnicos (operaciones de micro urbanismo, equipamiento público, mobiliario urbano, diseño ambiental...), pero también artísticos (jardinería, arte público, arquitectura de autor...), con resultados muy dispares” (Gómez, 2004: 40-41).*

Acebillo (1999) added that through public art, public spaces and squares went beyond being structural and became symbolic and significant spaces. These artists contributed not to a better decoration or *“decorar mejor”* of the space but to secure the project’s techniques, materials, textures and colors that permit to go beyond the functional and reveal the space’s complexity and universality.

They attracted national as well as international artists and sculptors like Richard Serra’s sculpture in Plaça de la Palmera (1985): *“La zona lindante con el Besòs, aunque en menor cantidad que otras, vio una serie de intervenciones importantes, siendo alguna de ellas de primer nivel internacional como la de Richard Serra en la plaza de la Palmera de Sant Martí” (Remesar, Grandas, 2005: 36).*

Incorporating public art and sculptures not only gave value and a better quality of life to public spaces, but also it played an important part in the “monumentalization” of the periphery, *“en este sentido, el arte público es fruto de un proceso histórico de monumentalización de la ciudad, y se comporta como elemento referencial, aglutinante de la imagen urbana tan necesaria para la construcción y desarrollo de procesos de identidad social” (Remesar, Ricart, 2010).*

Remesar and Grandas added that:

*“La política de reconstrucción de la ciudad impulsada por Oriol Bohigas se fundamentaba en una clara opción de dotar la periferia con contenidos simbólicos. Estos contenidos se desarrollaban bien en el proceso mismo del proyecto urbano de cualificación del espacio público, o bien en el desarrollo del programa de arte público que ha dado fama a Barcelona. Este programa formaba parte tanto de las iniciativas del gobierno central de la ciudad como de las de los propios distritos en que se divide” (Remesar, Grandas, 2005: 36).*

Jordi Borja points out the importance of aesthetics for urban projects aiming at transforming the city, as it implies a threefold purpose: as a sign of interest by the administration for quality and good work, as a city marketing tool used to draw tourists and investors and especially as an integrating element for the citizenship:

*“Los monumentos y las esculturas, la belleza plástica y la originalidad del diseño de infraestructuras y equipamientos o el cuidado perfil de plazas y jardines proporcionan dignidad a la ciudadanía, hacen la ciudad más visible y refuerza la identidad, incluso el patriotismo cívico de sus gentes. La estética urbana construye referencias culturales indispensables a los ciudadanos para apropiarse de la ciudad” (Borja, 1995: 14).*







**Fig. 229** 'Dona i Cell' by Joan Miró, 'Pajaritas' by Ramón Acín, 'Elogi a l'aigua' by Eduardo Chillida, 'Mistos' by Claes Oldenburg (Fabre, Huertas, 2004. Artpúblic)

During the Olympic Games of 1992 Barcelona received a big international recognition that led to constant flows of foreign visitors, promoting hotels, businesses, services, and large cultural infrastructures such as the MACBA, CCCB, the 'Auditori de Música de Barcelona', the 'Museo Nacional d'Art de Catalunya', the 'Teatre Nacional de Catalunya', among others.

Nevertheless, after the Olympics, the city was in a situation of debt and an economic slowdown was noted especially in the touristic sector. Although the public sector was working on stabilizing and recovering this situation of debt, the improvement of urban spaces continued in all the municipalities generating a qualitative change in public spaces. Many of the projects that began before or during the Olympics were finalized after 1992.

In 1997, Joan Clos (1997-2006) replaced Pasqual Maragall and *"a nivel urbanístico, éste es el periodo de la consolidación del «modelo Barcelona», especialmente en lo que respecta a la participación de la inversión privada en la financiación de la transformación urbana y a la realización de macro proyectos urbanísticos"* (Casellas, 2006: 71). During this period, economic competitiveness and management efficiency became recurring themes in local politics.

They went on developing the rest of the pending central areas. It was a time of a second renewal complementing the operations of 1992 on a larger scale and orientation.

Several improvements were made with the contributions of the 'Infrastructure Master Plan' (PDI), such as, adjusting private mobility, parking, and collective transportation; eliminating railway lines in Sant Martí and Sant Andreu; and recovering car-centered

avenues and axes with spaces for pedestrians, cyclists and greenery like, for example, the Meridiana, Gran Vía, Carrer Tarragona (1996), Rambla Brasil (1997), Rambla Guipúzcoa (1997), Avinguda Mistral (1986), among others.

In addition, several important macro projects intended to improve transportation by working on the new Sagrera project, the expansion of the airport, port, and 'Zona Franca' along the river Llobregat.

In the new 'Barcelona Exhibition Area' we find strong tertiary and residential developments, such as the Plaça Cerdà, Plaça Europa, Ciutat Judicial, Can Batlló, the new Marina district, Portal de la Fira, etc. (Acebillo, 2006).

On Diagonal-Sarrià, the macro-block of the shopping center L'Illa was completed in 1994; in Sant Andreu, 'La Maquinista' the former industrial sector transformed into a large shopping center and a residential area; and the Can Dragó leisure center in RENFE-Meridiana sector that joins the area between Sant Andreu and Nou Barris. They were accompanied by new parks like Parc l'Estació del Nord (1992), Parc de Sant Martí (1996), Parc de la Barceloneta (1997), among others.

In 1999 with the nomination of the city to hold the 2004 'Universal Forum of Cultures', the development of the Diagonal Mar began. In 2001, the prolongation of the Diagonal finally reached the sea by way of a large esplanade that covers infrastructures and facilities. As a result emerged Herzog and de Meuron's Forum building or 'Museu Blau', Diagonal Mar park and shopping center, and many high quality residential buildings, business towers and hotels.

Between the developments of the Vila Olímpica and Diagonal Mar, the industrial heritage particularly in Poblenou, was recycled and reused to create hybrid programs of new tertiary economy and building typologies (Acebillo, 2006) under the name of '22@BCN'.

It is a model of the public-private participation whose objective is the creation of a new productive district focused on knowledge-intensive activities that will attract new businesses (Casellas, 2006).

It was approved by the City Council in 2000 and involves the transformation of 200 hectares<sup>122</sup> of land assigned to be the nucleus of a new tertiary technological district through the transformation of obsolete 19th century old industrial fabric of the Poblenou. As a project of urban regeneration, it responded to the need of restoring the economic and social dynamism of Poblenou. It created a diverse, sustainable, and balanced environment with new high quality production centers, social housing, new businesses, facilities and green space, and university campuses involved in the fields of new technologies, knowledge, communication, and R&D (research and development) all aimed at improving both the quality of life and of the workplace.

Due to that Plaça de les Glòries took up a new central position with new projects programmed to be built around it. In addition, Parc Central Poblenou (2007) was created,

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<sup>122</sup> Of this 200 hectares and 115 city blocks it occupies, 3.2 million m<sup>2</sup> were allocated to offices and commerce, between 3500 and 4000 to new dwellings, and 220,000 m<sup>2</sup> of new equipments and green zones (www.22barcelona.com).

and Rambla del Poblenou was remodeled with its surroundings from Avinguda Diagonal to the beach.



**Fig. 230** Aerial view of Diagonal Mar and 22@ Poblenou (Ajuntament de Barcelona, 2009)

According to Borja (1995) all these urban rehabilitation and developments were the principle cause for the public-private partnership that helped the public administration in balancing the interests. The public sector was pushing the private sector to present “project plans” in order to enable immediate implementation, control the quality of the projects, and guarantee the balance of uses. Various new companies emerged from this partnership the likes of ‘Villa Olímpica Sociedad Anónima’ (VOSA), ‘Nova Icària, SA’ (NISA), ‘Promoció de Ciutat Vella SA’ (PROCIVESA), and ‘Barcelona Activa’.

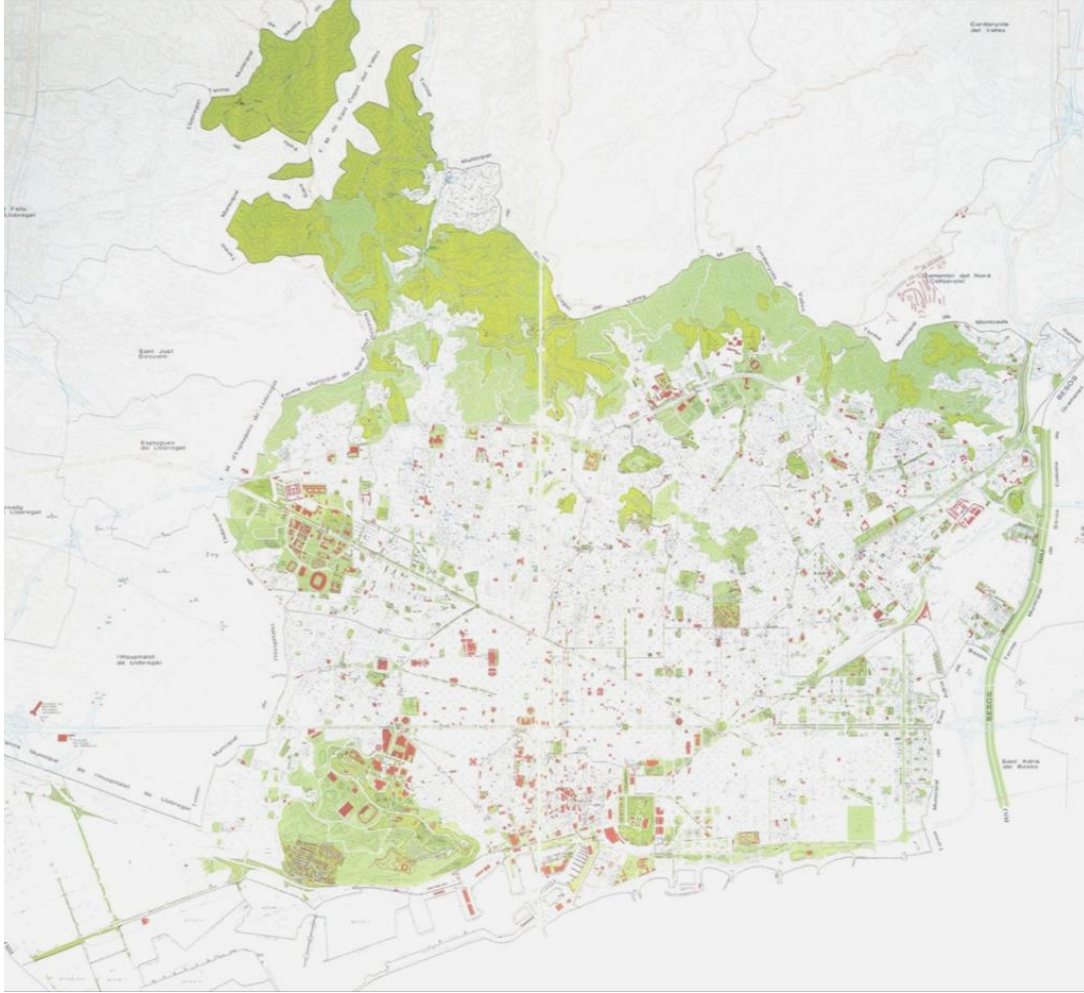
The ‘Plan Estratégico Metropolitano de Barcelona’ PEMB (Strategic Plan) existing since 1991, is probably the most complete formalization of the public-private cooperation which emphasized on economic developments, technological infrastructure and services generated from both public and private sectors (Casellas, 2006).

In addition, many campaigns for the city and public services were launched with slogans such as “Barcelona más que nunca” and “Barcelona posa’t guapa” where many facades and buildings have been rehabilitated (Borja, 1995).

*“[...] es en este contexto cuando se empieza a crear un modelo de participación público-privada que, como se analizará más adelante, creará las condiciones para la formación de un ‘urban regime’ en la ciudad en el que la participación del sector privado empezará a influenciar en el diseño de propuestas urbanísticas del Ayuntamiento” (Casellas, 2006: 70).*

Borja added that

*“los grandes proyectos post 92 (como la operación Diagonal Mar en el frente marítima creado por la Villa Olímpica y la ronda litoral) dependen en gran parte de la iniciativa privada que desarrolla la acción inicial publica. Se demuestran entonces las limitaciones de esta cooperación: el sector privado no actúa hasta que no se asegure la rentabilidad a corto plazo de la operación. Si la coyuntura no parece muy favorable el desarrollo es más lento que el previsto” (Borja, 1995: 15).*



**Fig. 231** Public spaces in Barcelona 1979-2004 (Montaner, 1999)

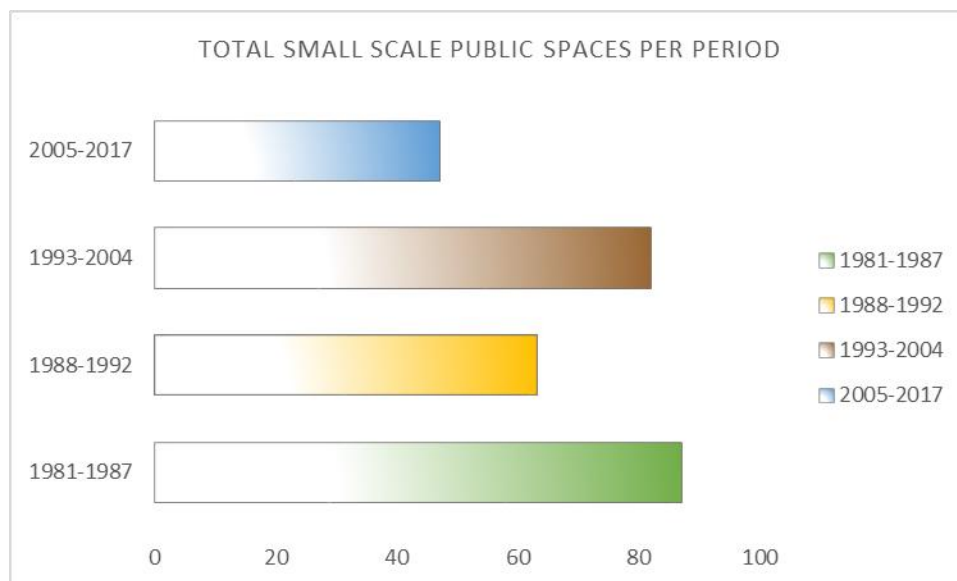
With the new Mayor Jordi Hereu (2006-2011), and Xavier Trias (2011-2015) after him until our present, the City Council did not cease to create small-scale public spaces in all the neighborhoods of Barcelona. Maintaining, improving, and renovating existing ones as well as creating new ones. And neighborhood associations and citizen participation played an important role in further regenerating their neighborhoods. And the sanctioning of the Llei de Barris (2004) –before being halted in 2010 due to the economic crisis– brought a new level of collaboration between the citizens, City Council and the Generalitat that helped more neighborhoods in the city and its metropolitan area, as we learn from Sant Andreu’s neighborhoods of Barró de Viver, and the ongoing projects of Bon Pastor (CR Polis, Universitat de Barcelona; Padilla, 2015; Ricart, 2009; Salas, 2015). And not fail to mention the municipal programs such as the Pla de Buits characterized by territorial and social involvement with the objective of dynamizing residual and disused plots in the city by encouraging activities of public interest and involvement of civil society promoted by public or private non-profit entities. In accordance with the neighbors open residual spaces classified for construction were temporarily converted



into experimental spaces a mixture of square and urban orchard (huerto) such as Plaça de les Germanetes<sup>123</sup> (2015-2016) in Eixample (Ajuntament de Barcelona. Bcn.cat).

Moreover, it seems that the city nowadays is upgrading its public spaces towards the road to ‘renaturalización’ and eco-green spaces –as demonstrated in the City Council’s latest publication *Plans i Projects per a Barcelona 2011-2015*– particularly in the built materials used like: the ongoing transformation of Plaça de les Glories into a large-scale green park, titled ‘Canòpia urbana’, a project by the Agence Ter and architect Ana Coello de Llobet; the new sustainable drainage systems and garbage disposals found in many parts in the city as in Poblenou and Raval among others; some party walls, through the Habitat Urbà, are converted into vertical photovoltaic biodiverse gardens –echoing the ‘Barcelona posa’t guapa’ of the 80s and 90s– like in Plaça del Pedró and a few in 22@ sector; permeable and photocatalytic pavements like the new pavements of Plaça Can Rosès and the interventions of architect Lola Domènech and agronomist Teresa Galí in Paseo Sant Joan (Esparza Lozano, 2014).

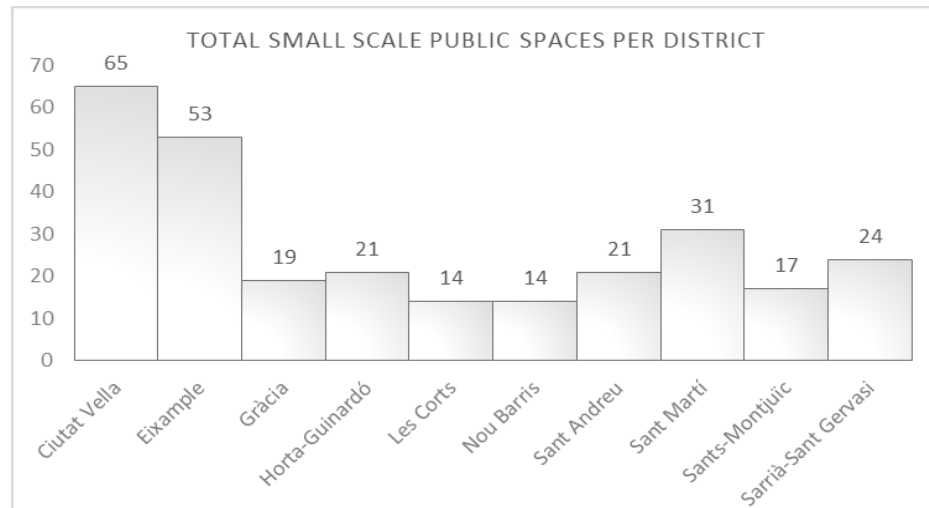
The future plan of Ada Colau’s City Council is to increase the city’s green areas to 44 hectares between 2015 and 2019 and promising an increase of 165 hectares by 2030 with a plan that involves around 150 operations ranging from squares, gardens, parks, recovered interior courtyards, as well as green roofs and party walls (LVG, 2017-05-15).



Graph showing approximately a total of 280 small-scale squares and gardens created in Barcelona between 1981 and 2017 (Author’s elaboration. See Annex)

<sup>123</sup> More information on Pla de Buits is found in the City Council’s website in ‘Ecologia, Urbanismo y Movilidad’

## Small-scale public space: Center-Periphery



Graph showing approximately a total of 280 small-scale squares and gardens created in Barcelona between 1981 and 2017, divided per district (Author's elaboration. See Annex)

### **Ciutat Vella**

After the dictatorship, Barcelona's historic center, Ciutat Vella, was physically and demographically degraded. The services were scarce and the dwellings were very old with weak structures. Many buildings in the historical centre were left empty, and a series of cycles began with an alternating abandonment of old residents and arrival of new residents. Every cycle meant further impoverishment for the overall area, and increasingly unstable social conditions caused by the new inhabitants. A big part of the population lived in unbalanced, precarious conditions. Young people abandoned the neighborhood leaving it for much older people with economic incapacities; for an abusive presence of tourism; and for exceeding low-quality tertiary offers causing irresponsibility, loss of identity and an increased marginalization, delinquency and insecurity. The neighborhood turned into a *"barrio 'irreal': mucha gente lo 'usaba' y poca gente vivía en el"* (Bohigas, 1999: 203).

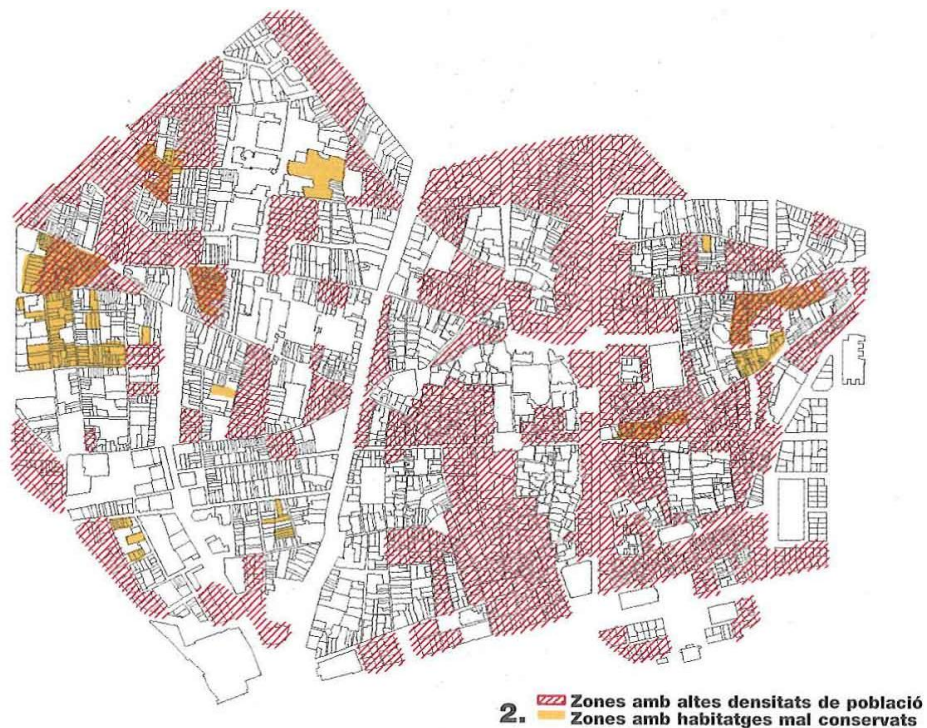
In most of the European cities, changes were radical since the population of many central neighborhoods were expelled and exiled to the new peripheral areas for the sake of urban regeneration leaving the newly rehabilitated center for new social groups of high economic level but with the same problems. This high but essential economic scale provoked social conflicts because it drained the life out of the historic centers.

In Barcelona, a less radical method was applied by constructing new equipments, demolishing some unhealthy dwellings, building new houses and rehabilitating those that ought to be due to their urban meaning or their easy adaptability, thus, maintaining

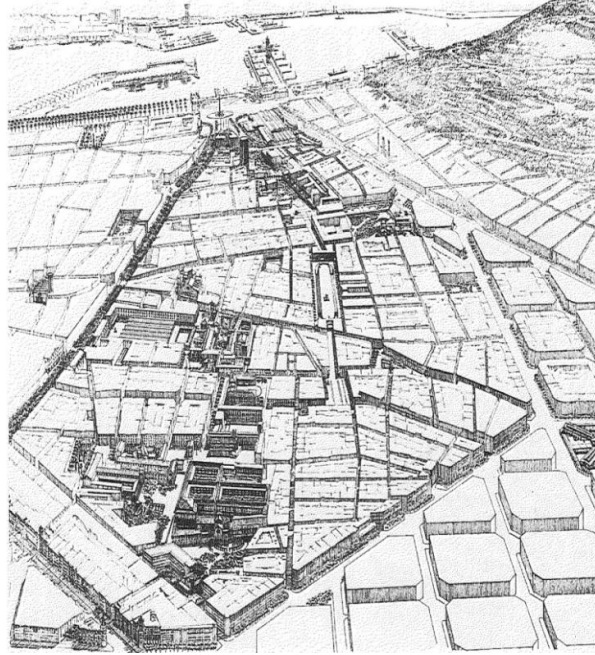
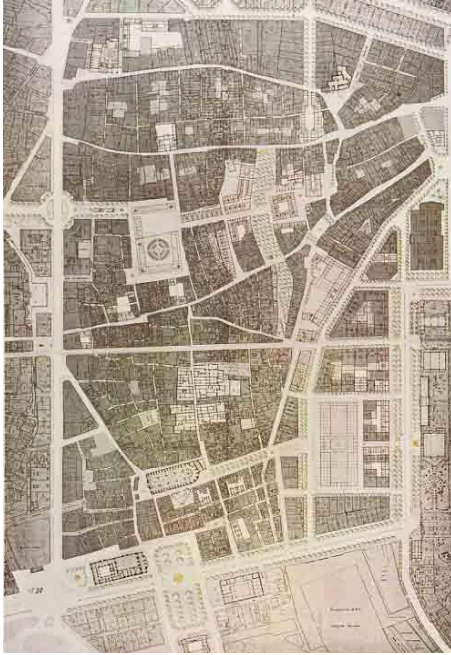
equilibrium between the city's old tenants and the new social groups who were attracted by this revitalization (Bohigas, 1999).

However, Barcelona's center was still considered as a dense and populated neighborhood in need of improvements and urban regeneration.

For this reason, one of the first solutions was the PERI that was drafted and planned for three of Ciutat Vella's four districts; El Raval, Oriental Sector, and Barceloneta', the plan for the Gothic was still being drafted at the time. During the period between 1984 and 1986, the City Council and the Generalitat elaborated an action program based on the PERI where each administration took charge of different scopes; the City Council to liberate plots, urbanize, and create spaces, and the Generalitat to build and revitalize housings and equipments.



**Fig. 232** Map showing high density of Ciutat Vell in red and housing in bad conditions in yellow (Busquets, 2003)



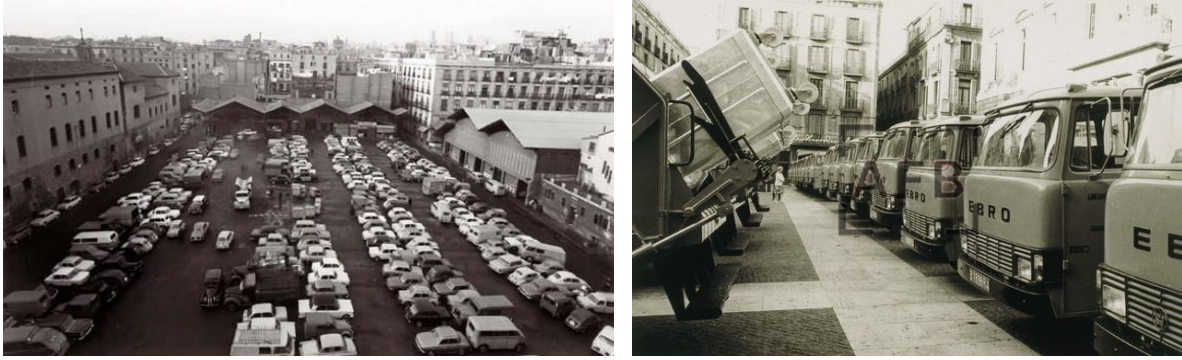
**Fig. 233** On left PERI of open spaces and streets of Santa Caterina and La Ribera neighborhood (Bohigas, 1983) and on right the drawing of 'Del Liceu al Seminari' (Busquets, 2005)

These Plans anticipated a volume of action for the coming decades that would provide Ciutat Vella with the dwellings, facilities, services and infrastructure it needed, and most important to equip it with the public spaces it lacked improving by that its residents' quality of life.

With the 'Plan de Vías', operations began by fixing problems of accessibility, organizing traffic, and renovating streets converting them into pedestrian or high priority pedestrian circulation (zona 30). The buildings were in desperate need of rehabilitation and many had to be demolished and replaced by new ones or by small-scale squares. Facilities and equipments were enhanced and improved as well. As for all the existing squares, they were in a degraded state, and occupied by cars due to the lack of space. Therefore, they were renovated or renewed with new pavements and urban furniture, and vehicle access was prohibited such as in Plaça del Pi, Plaça de la Vila de Madrid, Plaça Sant Pere, among others. There were some cases where the squares were totally renewed like in Plaça Folch i Torres.

The PERI, drafted by a team of architects Xavier Sust and Carles Diaz, included a previous study proposed in 1981 by architects Lluís Clotet and Oscar Tusquets under the name of 'Del Liceu al Seminari'. It was a preliminary study for this area of the Raval that involved the reuse of historic and monumental buildings like Convent dels Angels, Casa de la Caritat, and Casa de la Misericordia. It also volumetrically organized open spaces in the corresponding area from Plaça Castella until the Market Sant Josep renovating on the way Plaça Castella itself, as well as Plaça Vicenç Martorell, Plaça Sant Agusti, and Plaça de la Gardunya (Bohigas, 1983).





**Fig. 234** Vehicles occupying Plaça de la Gardunya on left (Estorch, 1960-1965. AFB) and Plaça Vila de Madrid on right (Pérez de Rozas, 1954. AFB)

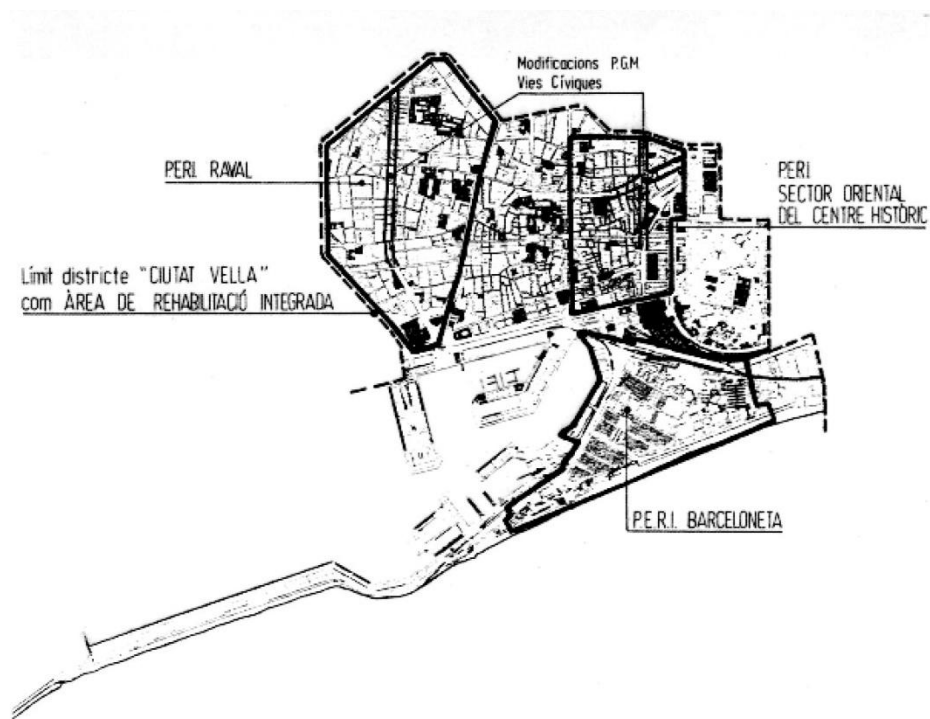
Hygiene and ‘esponjamiento’ in the historic city were applied in rearranging and creating public spaces based on the criteria of opening up more spaces in the high physical density of Ciutat Vella, reducing the degradation in its urban fabric and permitting its renovation. Creating squares was either by demolishing old, unhealthy buildings like in Plaça Salvador Seguí, Plaça George Orwell, Plaça de la Mercè, Jardins d’Emili Vendrell, Pou de la Figuera, or by demolishing old industrial warehouses like in Carrer dels Angels, or replacing cemeteries such as Fossar de les Moreres.

*“La higienización a través de la creación de espacios, ampliando los existentes, reagrupándolos o creando otros nuevos, con el derribo de las áreas en peores condiciones, es la contrapropuesta de la posible higienización promovida por la abertura de nuevas vías. La primera contrapropuesta que se planteó en Barcelona en este sentido fue precisamente la del GATCPAC en el Plan Macià” (Bohigas, 1986: 40).*

In his turn, Busquets adds to that

*“la idea d’esponjament creixent és una tònica comuna dels tres Plans (PERI), si bé amb formes de projecte diferents. L’esponjament, com a tècnica per refer l’estructura geomètrica de la Barceloneta, passa per reubicar-ne l’agrupament central. L’enderroc d’una o de diverses illes senceres és un recurs del projecte ben emprat als sectors de la Ribera i del Raval. Barcelona en té excel·lents exemples de bon resultat: la plaça produïda com un buit en el teixit ha estat un fet comprovat de nou a la Plaça de la Mercè, i es palesa com una de les tècniques més reeixides” (1986: 54).*

In Ciutat Vella, the creation of squares and green zones were very peculiar since the complex structure of network has led to a patchwork of green spaces and public squares intertwined between streets with a high pedestrian component. This urban complexity and diversity, with the reinforcement of pedestrian streets, resulted in an increase in multi-functional public spaces especially in cultural and commercial areas (Busquets, 2005).



**Fig. 235** PERI of Ciutat Vella's different sectors (Ajuntament de Barcelona, 1987) (Busquets, 1986)

In 1986, Ciutat Vella became an 'Àrea de Rehabilitació Integrada' ARI (Integrated Rehabilitation Area) –approved by the Generalitat– forming part of the 'Programa Integral de Actuacions' PAI (Integrated Actions Program), in order to obtain the necessary financing from the Spanish and the Catalan Governments. It was the decisive instrument in the implementation and development of the transformation program, and according to Serra (2003), the ARI is no more than a list of the urban operations already proposed by the PERI.

From this moment the administrations as well as the neighbors met every three months to analyze actions, works, programs, and strategies to be followed next by the Comisión Gestora del ARI and to be able to take a greater control of the transformation process (Serra, 2003).

It had six major lines of action: urban planning; social welfare and facilities; infrastructure and mobility; the promotion of economic activities; public safety and the use of public areas; and promotion of private restoration. And in doing so they needed to provide a program of public and private actions, specify the resources contributed from different administrations, and establish mechanisms of coordination, monitoring and control.

In 1988, to manage the program, the City Council created a mixed municipal company 'Promoció de Ciutat Vella, SA' (PROCIVESA), to promote and manage the district's transformation and revitalization.

In accordance with Spanish legislation, PROCIVESA was in operation for fourteen years, from 1988 to 2002.

Since the implementation process began and in the coming years, results were seen even though not all the objectives agreed upon were fulfilled. The urban transformation program was in accordance to the 'esponjamiento' based mainly in obtaining new plots of lands particularly out of demolishing unhealthy and degraded buildings for the creation of squares, gardens, new streets and residents, etc. Through expropriation PROCIVESA managed to liberate 89.000m<sup>2</sup> of land, which led to the demolition of approximately 335.00m<sup>2</sup> of built roof, 4.200 dwellings and 800 ground floor premises. Between 1988 and 2000, private and corporate sectors invested in Ciutat Vella, including Barceloneta, around 9,000 million euros, 50% on facilities and infrastructure and 25% on public spaces and the same on dwellings. The Raval received 60% from the total amount and the housing demolition process started and made way for the Rambla del Raval (2000) (Busquets, 2005). In the same neighborhood they opted to create a historical and architectural legacy, based on the ideas of 'Del Liceu al Seminari', with a cultural reuse of spaces and creation of new ones with the purpose of creating an artistic neighborhood like with the Casa de la Caritat, Liceu, MACBA, and the CCCB, among others.

Other studies were made from typological classification, sociological characteristics and other aspects such as the transformation project around Santa Caterina market with the opening of Avinguda Cambó and the remodeling of the market itself by Enric Miralles.

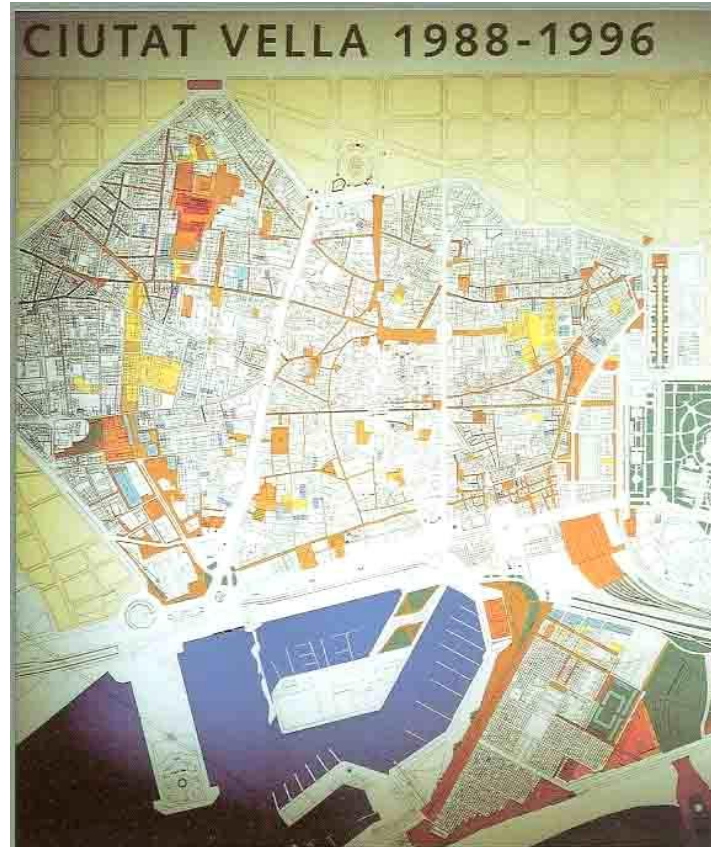


Fig. 236 Public spaces of the Pla Central in Ciutat Vella (Montaner, 1999)

Font (2000) added that they had represented a significant effort in the construction of new dwellings (1.700) and the rehabilitation of existing buildings (around 400) which amounts to about 15.000 housings and premises, that is, a total of 20% of the existing buildings in the district.

The liberated land led to the creation of many new small-scale squares such as Plaça dels Angels (1995), Plaça de les Caramelles (1990), Plaça de Joan Coromines (1991), Plaça Pieyre de Mandiargues (1995) among others, in Raval; Plaça George Orwell (1990-1991), and Plaça Joaquim Xirau in the Gothic; Fossar de les Moreres (1989), and Allada Vermell (1990) in Born; and Plaça Pompeu Gener (1989), and Plaça del Poeta Boscà (1998) in Barceloneta, to name a few. In addition two new green spaces of a bigger scale were created, that of Jardins de Sant Pau del Camp and Parc de la Barceloneta (1989).

*“ [...] pero, sobre todo, las operaciones de vaciado y esponjamiento de los tejidos históricos y la reurbanización del espacio público de calles, plazas y jardines, junto con la rehabilitación de las fachadas, han sido las acciones positivas más visibles, acompañadas de una creciente museificación y terciarización, no siempre compatible con el carácter residencial popular prioritario que quería mantenerse” (Font, 2000: 77).*





**Fig. 237** Creationg ofPlaça Joaquim Xirau after demolishing a building (Serra., 2003)



**Fig. 238** C/Allada Vermell during and after demolition (AA.VV., 2003)



Plaça Caramelles (Author, 2017)





Plaça de la Vila de Madrid nowadays remodeled in 2002 (Author, 2016)



**Fig. 239** Plaça de la Vila de Madrid with the bridge added in 2002 (Author, 2016)

Based on the positive experience and results achieved during the PROCIVESA era, Barcelona City Council reaffirmed its conviction regarding the public administration's intervention in the old town, and for this reason it created, after 2002, 'Foment de Ciutat Vella SA' as a mixed municipal company charged with continuing the task of promoting, coordinating, and managing the transformation and revitalization process.

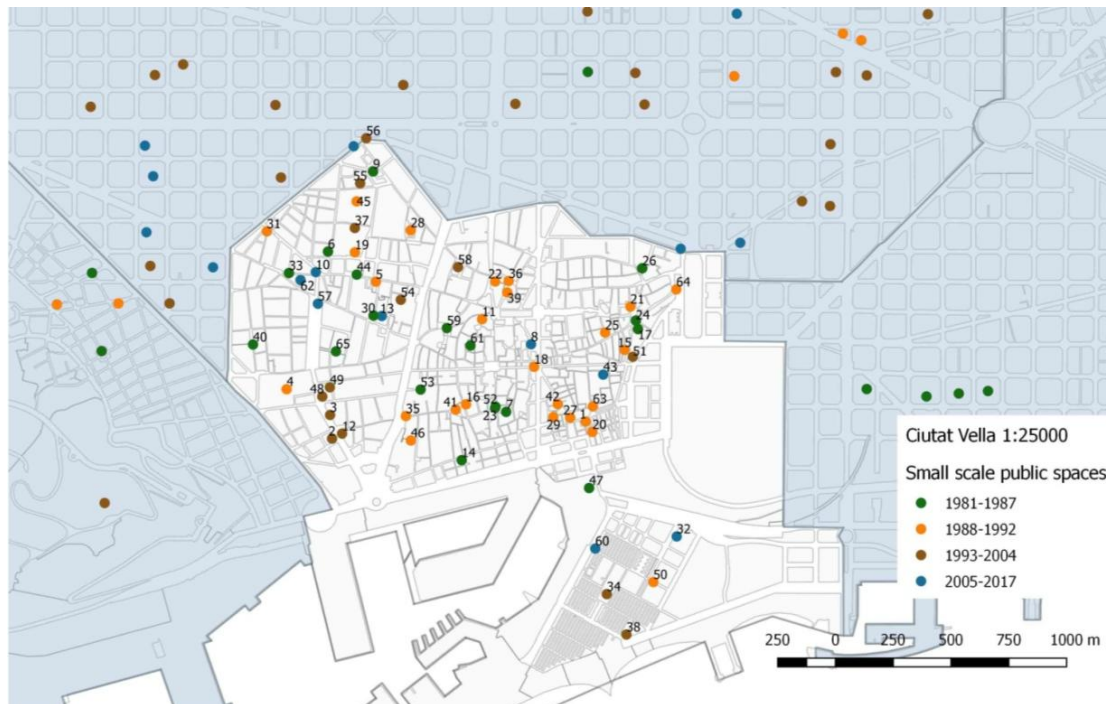
The City Council opted to maintain the same model through the 'Foment de Ciutat Vella, SA'. The process of transformation and revitalization allowed the creation of new public areas and the construction of homes and facilities on previously liberated land. This led to the generation of:

Some 110,000m<sup>2</sup> of occupied land have been transformed into public space (64, 355 m<sup>2</sup>), facilities (16, 322 m<sup>2</sup>) and housing (25,371 m<sup>2</sup>). From the 64,355 m<sup>2</sup>, 25,000 m<sup>2</sup> were

dedicated for new public spaces restoring to the district and its inhabitants sufficient amount of open spaces to develop their necessary civic activities.

Borja concluded that:

*“La degradación se reduce por medio de estrategias que combinen apertura de algunos ejes y espacios públicos con acupuntura múltiple en los puntos más críticos. Esta acupuntura combina normalmente, además de los espacios públicos citados, actuaciones de renovación de bloques de viviendas, equipamientos culturales o educativos (p. ej., universitarios), promoción del comercio, prevención de la inseguridad, etc. Sin olvidar que no está mal mantener o aceptar algunas áreas marginales que son al mismo tiempo refugio y aventura” (Borja, 1995: 34, 35).*



Map showing small-scale public spaces in Ciutat Vella between 1981 and 2017. (Author’s elaboration using cartographic sources from the Ajuntament de Barcelona and QGIS software. See annex)

## Eixample

After the consolidation of the Eixample, as we have seen in the earlier chapters, by 1980, 90% of its plots had been occupied accommodating a busy residential and commercial area with a resident population of 350,000 inhabitants and 300,000 jobs. In each block there is around 11,500m<sup>2</sup> of commercial activity and 600,000 cars circulate every day. With all the speculation of the last decades it was exhausted with buildings of different ordinances, heights and depths, lack of interior green courtyards as discussed several times throughout the thesis, and parking spaces increased from 20,000 to around 50,000 (Busquets, 1992, 2005; Busquets, Corominas, 2009; Sabaté, 1992; Gómez Ordóñez, 1992; Bohigas, 1986, Magrinyà, Marzá, 2009).

*“Aunque la densidad demográfica no sea una indicación demasiado definidora puede, de hecho, explicar la evolución congestiva del Ensanche. Entre 1890 y 1940 la densidad potencial era de 977 habitantes por manzana, mientras que en 1953 llegaba a 3.087. El PGM la redujo 1.944” (Bohigas, 1986: 60,61).*

With the PGM, there was a return to the model of earlier block ordinances, to the “spirit of the 1891 Bylaw” (Busquets, Corominas, 2009: 88) and Cerdà’s original proposal.

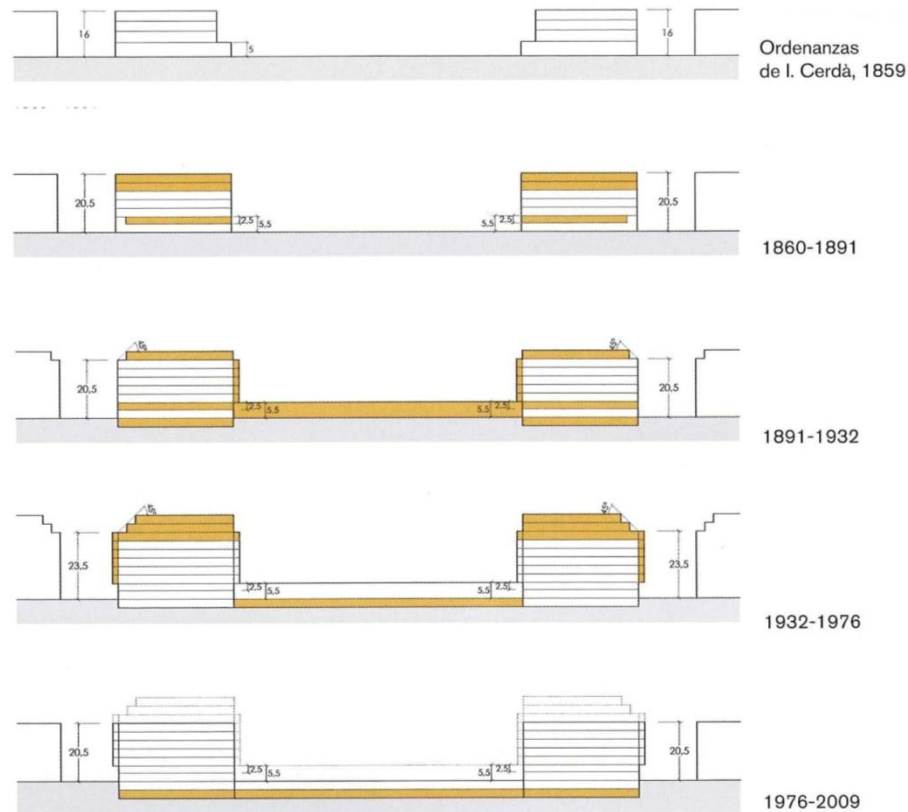
It “radically changed the rules for the transformation of the Eixample followed during the previous two decades”; building heights were reduced to 20.75 meters which had “serious repercussion on the four-storey additions to the ‘normal’ buildings in the Eixample, preventing those buildings in a good state of repair from being considered as potential building sites, that is to say to be demolished and rebuilt in order to take advantage of the permitted maximums” (Busquets, 1992: 388). In some buildings it allowed for a ground floor and mezzanine set back 3 meters, but in many cases it led to the setting back of the façade at the ground floor level up to the mezzanine producing by that strange rows of porches in the Eixample.

The occupation of the built volume or plot ratio was decreased to 70% which caused a change in buildings’ depth to 26 meters with maximum projections of 1.5 m on both the street and patio façades. At the same time the PGM proposed that the interior courtyards be recuperated and converted into gardens. As for the ones that remain occupied, the height of constructions must not exceed 4.5 meters. It clearly aimed at reducing densification as well as consolidating a series of amenities, defining new ones, and creating new open spaces.

	<b>Cerdà’s proposal</b>	<b>Eixample Bylaw 1891</b>	<b>Eixample Bylaw 1932</b>	<b>Eixample Bylaw 1942/1947/1958</b>	<b>Regulations of PGM 1976</b>
<b>Blocks perimeter</b>	2/3 sides built App. 50% open space Open interior courtyard	4 sides built (whole perimeter). App. 30% open space Interior courtyard built 1 storey bldg.	4 sides built (whole perimeter) Total occupation of interior courtyard	4 sides built (whole perimeter) Introduction of semi-basements and basements Construction in interior courtyard reached 5.5 meters	Occupation of built volume reduced 70%
<b>Blocks depth</b>	20 meters	28 meters Interior Patios	28 meters	28 meters	Reduced to 26 meters 1.5 meters projection on street or patio side
<b>Blocks height</b>	16 to 20 meters (gf+3)	22 meters (gf+5)	Adding 1 <sup>st</sup> penthouse 3 meters away from the façade	Adding 2 <sup>nd</sup> penthouse 3 meters away from the 1 <sup>st</sup> penthouse. Adjusted height without penthouses 24.4 meters <b>(1947)</b> Advancement of the penthouse limit to the façade <b>(1958)</b>	Reduced to 20.75 meters (gf+5) Many courtyards recuperated. The built courtyards height reduced to 4.5 m No permission for 1 <sup>st</sup> and 2 <sup>nd</sup> penthouses

This table shows the Eixample’s regulations between the original Cerdà Plan until nowadays, with the new added column of the PGM of 1976 (Author’s elaboration from different sources Martorell, 1959; Bohigas 1963; Busquets, 1992; Sabaté, 1992; Magrinyà, Marzá, 2009; Busquets, Corominas, 2009).





**Fig. 240** Evolution of the Eixample ordinances (Magrinyà, Marzá, 2009)

Before the decentralization of Barcelona into new districts, *“the zoning, diluted the unitary nature of the Eixample, which was fragmented according to the criteria of the urban fabric of other parts of the Metropolitan Area”* (Busquets, 1992: 388).

However, the establishment of the Eixample District in 1983, made its recovery possible based on specific ordinances of rehabilitations and improvements.

In this respect, in 1983, the City Council launched an initial study and survey for the Ensanche carried out by the architect Joan Busquets and the engineer Josep L. Gómez Ordóñez, entitled ‘Estudi de l’Eixample’. In general terms, it responded to the intention of rehabilitating the blocks and recovering the interior courtyards. The purpose of the study was to define the actual contents of the Eixample, to achieve a diagnosis that situates the problems of the blocks, and establish planning policies that would provide a system of solutions.

Their analysis produced a list of solutions for the following: 1- the Eixample’s form and morphology; 2- the organization of streets; 3- the superficial use of streets; 4- circulation; 5- distribution of large infrastructures; 6- the use of the streets’ underground concerning the sanitary system and public transportation; 7- the distribution of activities; 8- the ordinances of buildings; 9- Heritage conservation; and most importantly, 10- Free spaces

and equipments; and 11- the interior courtyards of the blocks to which they concluded that they should be recuperated.

As Bohigas pointed out they must be *“ampliadas y sobre todo iniciar una política de lenta reconversión de alguna parte de estos patios, previendo su ocupación limitada en el curso de las transformaciones de la edificación que se irán produciendo en los próximos años”* (Bohigas, 1986: 68), in addition, taking advantage of the available free spaces and convert them to facilities or green spaces.

In 24 April, 1986 the ‘Consejo Metropolitano de la Corporación Metropolitana de Barcelona’ agreed to approve the ‘Ordenanza de Rehabilitación y mejora del Ensanche de Barcelona’ through the Bylaw 7 of 1985.

Its objective was to protect the Eixample; conserve its heritage, architecture and facades; organize and centralize the blocks; slightly reduce the building ratio; and opening up the blocks’ interior patios in order to free them for community or public use and transform them into green spaces as in the original plan. As a matter of fact, this project was already outlined in the PGM and was extended by the ambitious scheme and works of ‘ProEixample S.A’, a management body set up to promote and encourage improvements in this area of the city (Esteban, 2004).

Concerning the interior courtyards, the ordinance’s articles dictate that:

*“Art. 20.2 e) Espacio libre interior de manzana. -En las actuaciones de nueva planta situadas en manzanas en las que la profundidad edificable, resultante de la aplicación del art. 242 de las NN.UU. del P.G.M., sea igual o superior a 20 metros y no estén atravesadas por un pasaje, no será edificable, ni siquiera en planta sótano, la parte de finca situada a una distancia de las alineaciones de vial, superior a una vez y media de profundidad edificable, debiendo destinarse este espacio a jardines. Ello no obstante, se tolerara que pueda ocuparse parte del subsuelo de este espacio ajardinado, para establecer un paso de comunicación entre los edificios de la manzana situados en distintos frentes de la misma, siempre que ello no suponga la destrucción de los jardines o arbolado existentes y que su superficie quede ajardinada, exigiéndose a estos efectos, un espesor mínima de tierras sobre el forjada o bóveda de dos metros. El ancho del paso será la mínima funcional necesaria, sin que en ningún caso sea superior a 7,50 metros. Se autorizan, también, las escaleras caladas de comunicación entre la planta primera y las terrazas de las plantas bajas, así como entre éstas y el espacio ajardinado en el interior de la manzana”* (Ajuntament de Barcelona, 1986-07-25: 20).

*“[...] Art. 21.2 C) Espacio libre interior de manzana. - a) En las actuaciones que comporten aumento del volumen existente, no se autorizaran incrementos de edificación en el espacio libre interior de manzana, ni en el subsuelo. Excepcionalmente, cuando existan construcciones en el espacio libre definido en el artículo 20.2.e), se autorizarán esas obras en planta baja y sótanos en el espacio edificable definido por el mismo artículo, con la condición de que el espacio interior quede libre y ajardinado.*

“[...] Art. 21.4 2 *Fachadas al espacio libre interior de manzana. -Su tratamiento será predominantemente plano, acristalado o abierto*” (Ajuntament de Barcelona, 1986-07-25: 21).

The project to recover the interior courtyards began in 1987 and continues to advance in compliance with the ‘Pla d’Actuació del Districte de l’Eixample’.

Moreover, the City Council created the company ProEixample S.A. to be in charge of recovering the interior courtyards and convert them into green spaces. This corporation focused on the reactivation of the streets and façades; cleaning the inner space of the blocks and converting them into public, green areas; and when possible, reconstruct or add diverse equipments and facilities. This policy was under the ‘Pla de Recuperació d’Interiors d’Illes’. ProEixample in their turn commissioned the ‘Centre de Política de Sòl i Valoracions’ (CPSV) of the Universitat Politècnica de Catalunya for a GIS system to facilitate the company’s research, analysis and graphical visualizations in order to adequately implement their designs and transform the Eixample.

Nevertheless, in spite of the difficulties of relocating residential, parking, and storage buildings, by 2010, ‘ProEixample’ has recovered 44 block interiors that represent a total area of 93.000m<sup>2</sup>, equivalent to 12 regulation-sized football pitches. This provided the inhabitants of the neighborhood with a green space approximately every 200 meters. And by 2013 they have recovered around 50 blocks.

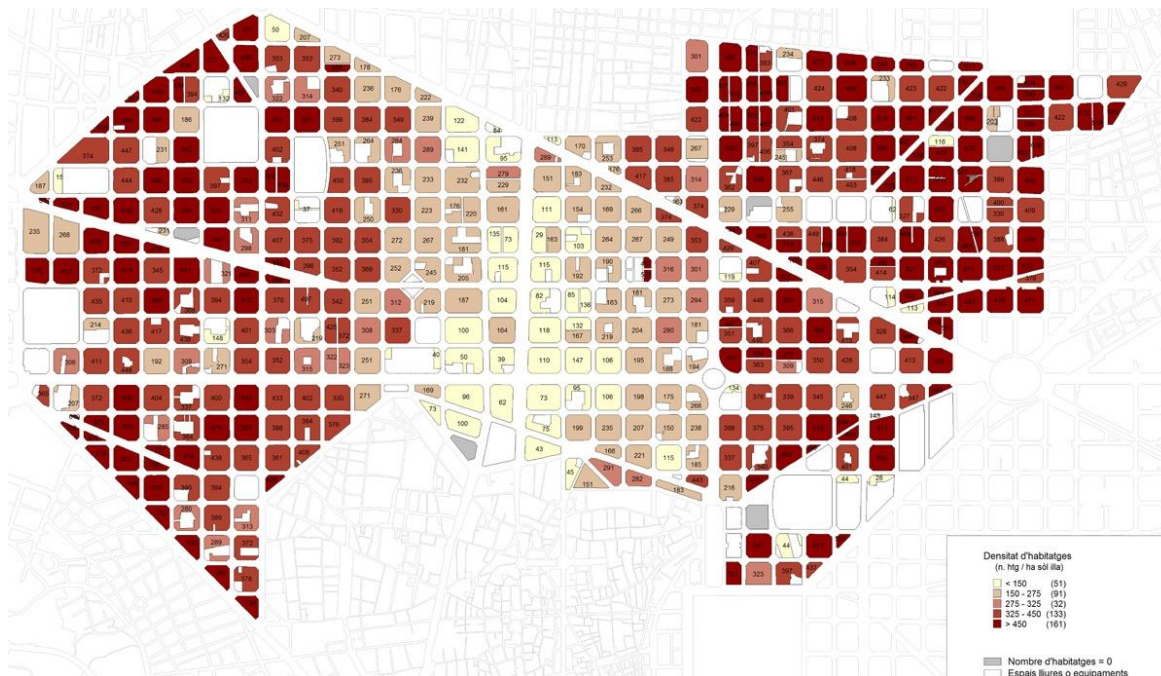
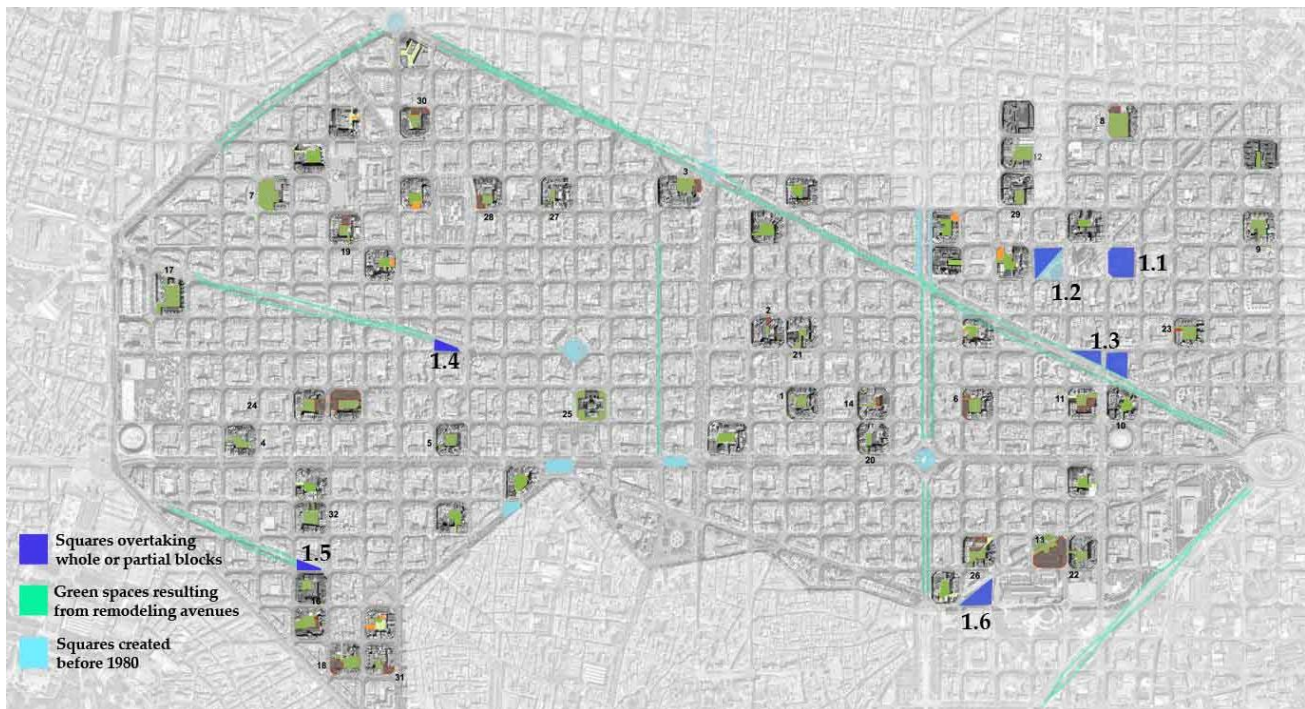


Fig. 241 The density in the Eixample created by the CPSV of the UPC (Any Cerdà)



Author's elaboration of the recovered interior courtyards and public squares in the Eixample based on a map already initiated by ProEixample. On the upper right of the map are three additional interior blocks of the ensanche that were recovered but they fall under the district of Gràcia (Busquets, Corominas, 2009) (Any Cerdà).

Between 2009 and 2010, another important exhibition took place marking the 150 anniversary of Cerdà's Plan that took place in the CCCB, under the name, 'Any Cerdà', and organized by the City Council, Joan Busquets and Miquel Corominas. The exhibition had a large series of activities, events, debates, and itineraries exploring Cerdà and his plan for Barcelona while making comparisons with other city expansions. The work of ProEixample and the recovery of the interior courtyards were also exhibited and became part of the exhibition's archive and were later published. As per the exhibition, the ProEixample did an analysis of the blocks classifying their courtyards into several types:

**Passages:** some are accessed by passages that lead to the open space and in some cases a passage with continuity leading to the other street side of the block such as in Jardins Montserrat Roig, and Jardins Torre de les Aigües the first interior block to be recovered in 1987.

**Gateways:** where they are accessed through a public building in the block such as Jardins d'Elizalde, and Jardins Constança d'Aragó.

**Fissures:** where there is a duality of open spaces causing a fissure in the block or a diagonal layout such as in Placeta de Joan Brossa, Jardins Carretera Antigua d'Horta.

**Openings:** by connecting a pedestrian layout to the open space that one can walk through or stay such as in Jardins de la Indústria

**Mixed:** Some are a mixture of two or more as in Jardins d'Antoni Puigvert is a mixture of opening, passage and gateway (Busquets, Corominas, 2009).





Fig. 242 Jardins Torre de les Aigües (Busquets, Corominas, 2010)



Jardins Montserrat Roig (Author, 2017)



Fig. 243 Jardins Montserrat Roig (Author, 2017)





**Fig. 244** Jardins de la Indústria (Author, 2017)



In addition to the recovery of the Eixample, there are several squares, not created by ProEixample, but part of the series of small-scale squares in the city, that were either remodeled like Plaça del Gall (1.4) in 1984 while remodeling Avinguda Roma; and Plaça de la Sagrada Família (1.2) in 2010 where it was landscaped with new benches, lighting, and gardens; or newly created ones like Plaça Gaudi (1.1) in 1981 the last square created by Rubió i Tudurí after finally demolishing the factories that existed in the block; Plaça de la Hispanitat and Plaça Pablo Neruda (1.3) in 1990 two residual triangles with once existing small constructions on the Diagonal; Jardins de l'Alguer (1.5) in 1984-1987 after remodeling Avinguda Mistral; and Plaça d'Andre Malraux in 2014 as part of the 22@ projects in Poble Nou.

These spaces complement the series of large-scale parks or squares in the Eixample like Plaça de les Glories (on the limits), the green spaces around the l'Auditori and Teatre Nacional, Parc de l'Estació del Nord, and Parc de Joan Miró.



**Fig. 245** Plaça Gaudí the last square created by Rubió i Tudurí in 1981 a garden with a lake in the middle (Unknown, 1988)



Plaça Pablo Neruda (Author, 2011)



Plaça de la Hsipanitat (Author, 2011)

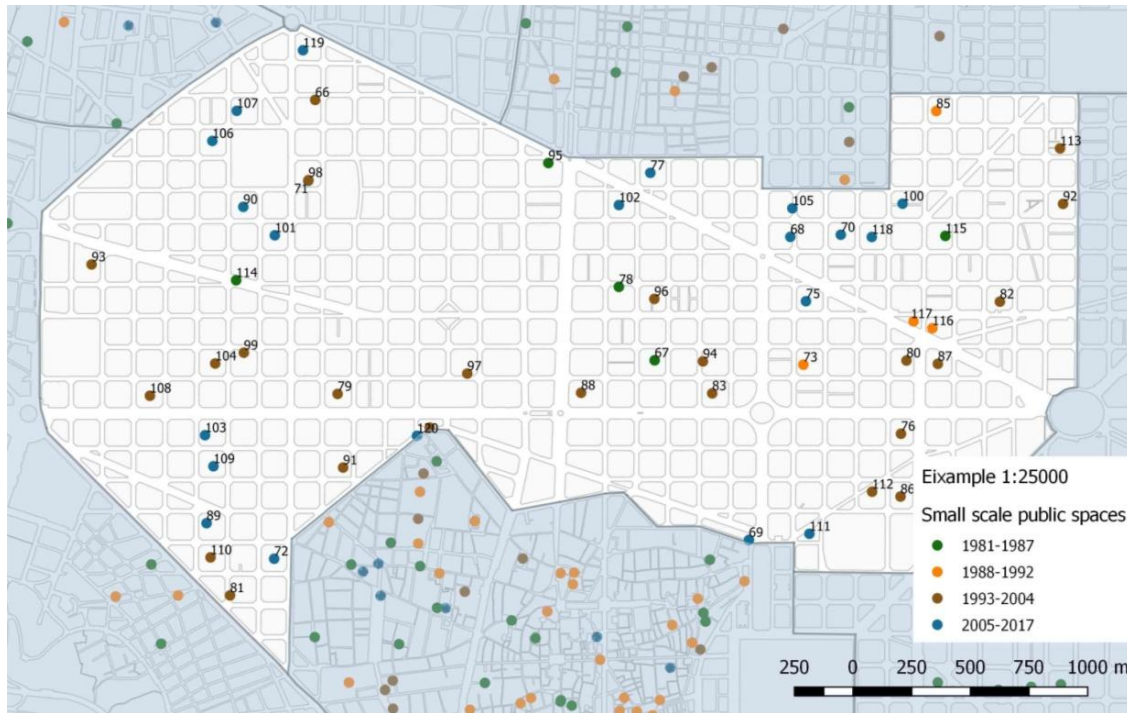






**Fig. 246** Above two pictures Plaça Pablo Neruda and below Plaça de la Hispanitat (Author, 2011) Both squares created in 1990 by architects Maria Dolors Febles and Ramón Auset as a square-garden situated on an immense road intersection separated by Carrer Marina and delimited by Carrer Sardanya, Aragó and Avinguda Diagonal. The squares have an organic-shaped design, characterized by pavements of brick and stones, multileveled curves, green slopes, arenas, gardens, and trees located near the perimeters of the space This mural on Plaça de la Hispanitat was part of the “Barcelona, posa’t guapa” campaign, inaugurated in 1992, and designed by ‘Cité Création’ who won the first competition of the games by being chosen from an international selection to do the first painted wall of Barcelona. It simulates a typical Eixample architecture in a tromp-l’oeil technique depicting Pablo Picasso, Antonio Gaudi, Christopher Columbus and a total of 30 most famous figures of Catalunya (Author, 2011)





Map showing small-scale public spaces in Eixample between 1981 and 2017. (Author's elaboration using cartographic sources from the Ajuntament de Barcelona and QGIS software. See annex)

## Periphery

After the uncontrollable urban growth during the dictatorship, Barcelona's periphery was found in a state of degradation, segregation and neglect.

They were aggravated by the discontinuity with the center; social marginalization; irregular density; lack of urban centrality; hygiene; and by the lack of instruments defining the urban infrastructure and minimum urbanization like streets, squares, monuments, metro-wide services, urbanized parks and commercial integration (Busquets, 1999).

The periphery neighborhoods' urban territory was divided and defragmented by residual or free spaces mainly the result of railway tracks and road networks like, for example, in the complexity network of both Avinguda Meridiana and Plaça de les Glories which divided the neighborhoods and made the extension of the Eixample in Poblenou difficult. This free space as Brú defined is not

*"in the strict sense of the term, but rather space amongst things. It is the result of the existence of unresolved tensions that have made its occupation impossible. The idea of current free space should therefore be transposed to that of the urban void, and its meaning should be sought in the tension that has produced this void. In a brief overview of reasonably large-scale open spaces in, say, Barcelona, we would possibly find none that do not fall within the above parameters (Brú, 1989: 50).*



When Brú was discussing the problems of urban voids in the city especially in “no-man’s-land” places like the railway lines, junctions, or ring roads (beltways) of the city, he pointed out that “ ‘squares’, ‘ramblas’, ‘parks’ and ‘monuments’ are sometimes used in an attempt to articulate, over these voids, the undifferentiated, underequipped and often chaotic inherited city, attempting to give pieces of the urban continuum «their own» character by heaping cliché upon cliché (Brú, 1989: 50)

The first steps towards improving the periphery were by recovering, when possible, residual or occupied spaces that had been classified by the Plan Comarcal and the PGM as green zones.

The majority of public spaces and squares in those areas did not acquire an identity nor an urban character, some even lacked minimum urbanization, and as for the historic or the ones created a few decades earlier were found in a state of neglect or occupied by vehicles.



**Fig. 247** Defragmentation and residual spaces in Nou Barris in 1980 (Càceres, Ferrer, 1993)



**Fig. 248** Defragmented and residual spaces in the periphery on left the II Cinturón Valldaura ring and on right Plaça Dr. Moragues before its urbanization (Ajunament de Barcelona, 1987) (Ibid, 2009)

Therefore, reclaiming and urbanizing their public spaces was an important issue to provide the neighborhoods with a sense of character, centrality, and collectivity:

*“Es preciso, por tanto, reordenar, urbanizar estos espacios —«monumentalizarlos», en el sentido que ha adquirido este término en las propuestas más progresivas de urbanismo— con criterios de centralidad, dándoles los valores significativos de la colectividad, aquellos valores que todavía persisten más o menos lesionados en la ciudad histórica. Es decir, darles la calidad urbana que no han tenido nunca” (Bohigas, 1986: 18).*



**Fig. 249** Vehicles occupying public spaces in Gràcia (Bohigas, 1983)



Achieving these realities was through using different methods and instruments such as, rehabilitating buildings, sanitation, pavements, reconsidering facilities and public spaces, and the reusing of heritage. Bohigas emphasized that within the instruments and methods of the 'Area de Urbanismo del Municipio' there is a precise path that had been positively used in the city which is that of acting directly on public spaces and converting them into spaces of quality. And in their turn they act as "regeneration spots" for their surroundings:

*"actuar directamente en el espacio público, y hacerlo con la doble intención de convertirlo en un equipamiento de calidad y en un punto de generación de transformaciones espontáneas. Es evidente que, cuando en un barrio degradado o no conformado urbanamente se reconstruye -o construye- un espacio público, éste actúa como un spot ejemplar, como motor de una regeneración del entorno bajo la iniciativa de los propios usuarios, incluso provocando un nuevo equilibrio de la demografía, a menudo alterada por la persistencia de unas condiciones físicas deficientes y por la falta de una estructura de habitabilidad y de significación y representación urbanas"* (Bohigas, 1986: 18).

Operations in the periphery were carried out through the PERIs and special more specific plans within them that corresponded to the districts and neighborhoods with urgent need of developments.

Each neighborhood was studied from an urban point of view, that is, defining its public space, determining its functional and symbolic characteristics, and finally along with the citizen participation, projecting an adequate, flexible, and new form and function for the neighborhood (Bohigas, 1999). Most of the solutions provided in these years came from the debates, negotiations and joint actions of technicians, architects, and neighborhood associations in a fairly fluid dialogue with the democratic administrations.

In addition to the creation of small-scale squares, "Monumentalizar la periferia" was by the placing of monuments and public art that promoted and unified the urban and social identity of the neighborhoods. They proved to be quite effective in communicating their objectives to the citizens, thus, is the meaning of the expression "monumentalizar".

*"Bohigas, hace ya veinte años, insistía en la necesidad de lo que denominaba monumentalizar la periferia, en el valor de los monumentos como garantes de la identidad y de la memoria y también llamaba la atención sobre la concepción amplia y común que considera monumento no tan solo la escultura pública o el arte público sino también aquellas obras de arquitectura a las que la gente va otorgando este carácter"* (Lecea, 2004: 5).

They provided the periphery with a symbolic content that:

*"se desarrollaban bien en el proceso mismo del proyecto urbano de cualificación del espacio público [...].El interior del territorio se remodela de forma constante, abriéndose plazas y mejorando ostensiblemente la calidad del espacio público, en parte con la instalación de obras de arte público, algunas clara permanencia de retazos de arqueología industrial*

*símbolo de un pasado cercano, otras elementos de provocación, pero siempre reflejando un comportamiento cívico de gran impacto social y urbano” (Remesar, Grandas, 2005).*

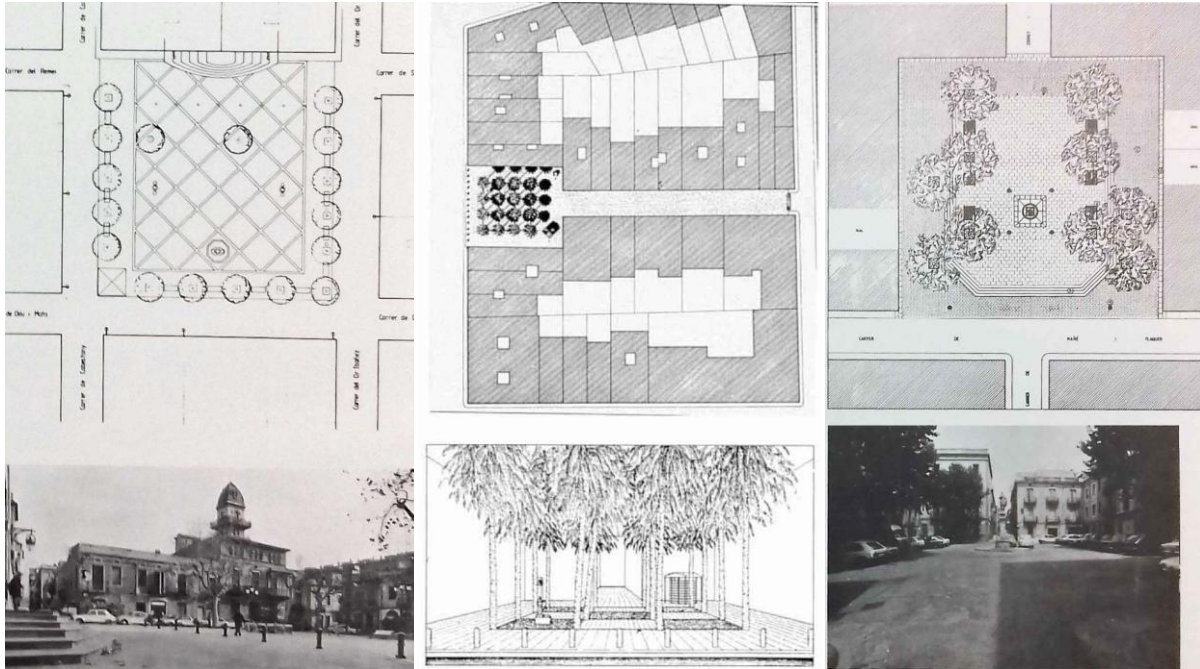
The effect of the Olympics was a key reference point in the periphery, especially in the new central areas, causing urban development to reach the most remote parts of the city like the areas of the Besòs. The urban fabric of the surrounding areas was restructured and connected by creating squares, parks and fixing the road connections, and urban axes. They provided the residents a better usage of space, reconciling them with their environment after many years of struggle to dignify their neighborhoods.

*“[...] la forma, el uso y el contenido significativo de los nuevos espacios libres son los elementos que a medio plazo actuarán como matrices de transformación del barrio de una manera natural –casi diríamos ‘popular’–sin dañar ni la morfología ni la estructura social. Actuarán directamente –higienización, lugar de vida y responsabilización colectiva, representación monumental– e indirectamente como ejemplos de exigencia de urbanidad” (Bohigas, 1986: 42).*

Through the ‘Plans Especials de Protecció’, the historic and existing squares in the historic centers of the peripheral neighborhoods were renewed and renovated with new pavements, and urban furniture, as for example, in Sarrià, Horta, Sant Andreu, and Gràcia. During their renewal, many subterranean parking were created beneath the squares, to provide more spaces, which became a common factor when renovating or creating them.



**Fig. 250** PERI of Gràcia for renovating its small squares  
(Ajuntament de Barcelona, 1987)



**Fig. 251** Proposals for renovating the historic squares starting with Plaça Concòrdia in Les Corts, Plaça Trilla in Gràcia, and Plaça Sant Vicenç de Sarrià in Sarrià (Bohigas, 1983)

In Gràcia, new small-scale squares were created such as Plaça del Poble Romani (1993) that replaced an old factory and still preserves its chimney; Plaça de John Lennon (1993) replacing a small block of buildings; and Plaça d'Anna Frank (1999) a small square at the entrance of the neighborhood's Ateneu with a sculpture dedicated to her (Fabre, Huertas, 2004. Art públic).

In addition to that, three interior courtyards of the ensanche blocks that belongs to the district of Gràcia were recovered, that of Jardins de la Sedeta (1987) , Jardins Caterina Albert (1989), and Jardins d'Antoni Puigvert (1995). Plaça Lesseps after many years in construction and neighborhood association struggles finally took its final shape in 2009.







**Fig. 252** Above Plaça d'Anna Frank, and below Plaça John Lennon (Author, 2011)

In Les Corts, the historic squares like Plaça Concordian and Plaça Can Roses were renovated, as well as the ones created during the Porcioles era were redesigned while taking advantage of constructing subterranean parking like Plaça Sol de Baix (1989). The residual spaces in the neighborhood were converted into square-gardens adding more green to the area like Plaça de les Corts (1988).

As for Sants, in addition to renovating its historic squares like Plaça d'Osca and Plaça d'Iberia, Plaça dels Països Catalans (1983) and Plaça de Joan Peiró (1991) were created to form a transitional entrance to Sants Estació. Others replaced old factories like Plaça de Can Muns. As for Poble sec neighborhood gained many new ones that ventilated its dense fabric the likes of Plaça de les Navas (1982) and Plaça del Surtidor (1983).

Horta-Guinardó also had its share in renovating the historic squares like Plaça d'Eivissa and Plaça Bacardí. It was subjected to many projects of different scales like the development of Vall d'Hebron, one of the Olympic rings, La Clota and Carmel neighborhoods, as well as improvement works performed on the existing Parc del Guinardó and Parc del Laberint d'Horta. Interestingly, in Carmel neighborhood, known for its multilevel topography and steep slopes, small-scale squares like Plaça Salvador Allende were created in 1985 by architect Jordi Farrando as a solution to restructure and connect the hill's upper and lower levels.

Sant andreu had its historic Plaça Mercadal (1983) renewed and restored, and its Jardins d'Elx converted into a hard square in 1983. The district itself suffered from defragmentation and segregation particularly due to the railway tracks, and the conflict between the old neighborhood and the superimposing new areas which resulted in many residual spaces. Neighborhood associations and citizen participation played an important role in rehabilitating, developing, and dignifying the district's different neighborhoods.



In addition to the ongoing Sagrera project, residual spaces were converted into parks like Parc del Pegaso, and new squares and gardens appeared endorsed with public art like Plaça General Moragues (1987), and Plaça d'Islandia (1995) with its impressive geyser fountain the work of Carme Fiol and Andreu Arriola (Fabre, Huertas, 2004. Art públic) (Fiol, Arriola, 2012).



**Fig. 253** Plaça d'Islandia with the fountain geyser a public art in itself (Author, 2011)



Nou Barris had several PERIs developing its various neighborhoods, where the neighborhood associations played an important role in reclaiming their public spaces. The first square to be created in Porta was Plaça Soler (1983) after being a residual space for many years even though it was qualified by the Plan Comarcal as a green area. Among the considered small-scale squares it is the largest consisting of a space divided into two parts, a hard square with a gradual bridge surrounding it and a garden with trees and a pond where the sculpture 'Homentage a la Mediterrania' the work of Xavier Corberó is placed (Fabre, Huertas, 2004. Artpúblic).

Redeveloping and urbanizing the axes of Via Júlia, by Antoni Roselló and Sergi Aguilar which included two sculptures unveiled in June 1986, led to the creation of two squares one of the first being Plaça Francesc Layret (1986) and then Plaça d'Àngel Pestaña (1986) both created by architect Enric Pericas. A set of sculptures, 'Escullera', by Jaume Plensa were placed in the first square before being moved after 11 years to Via Julia, each placed on a different level. As for Plaça d'Àngel Pestaña, a sculpture by Enric Pladevall known as 'Font Mutant' was placed on one side of the square. (Fabre, Huertas, 2004. Artpúblic). However, with the subterranean parking policy, both squares had to be totally remodeled in 1999, and the latter was redesigned by Enric Miralles and Benedetta Tabliague and its sculpture reinstalled in the square in 2003. In that same year, the district gained a new square that of Plaça Harry Walker with a spectacular fountain the work of architect Màrius Quintana.

On the other side of Nou Barris, Plaça Virrei Amat was remodeled with the same elements used in the new Parc Central de Nou Barris, also created in 1999 by Fiol and Arriola, integrating it in with the area of the park.



**Fig. 254** Plaça Francesc Layret under construction due to subterranean parking. Bottom right the square nowadays and on the bottom left is one of the pieces of 'Escullera' by sculptor Jaume Plensa once placed in the square before being moved to the side street on Via Júlia (Gri Espinagosa, 1999. Bcnroc) (Author, 2011)





**Fig. 255** Plaça d'Àngel Pestaña on left in 1990. Below on right is the square nowadays. It was remodeled in 1999 by Miralles and Tabliague due to a subterranean parking. On below left is the 'Font Mutant' resting on a fountain (Gri Espinagosa, 1990. Bcnroc) (Author, 2011)





Fig. 256 Plaça Harry Walker another fountain sculpture (Author, 2011)

Sant Martí is divided by the Meridiana, Gran Via, Aragó and Diagonal. Its various neighborhoods passed through different stages of development that are still under construction in our present day with 22@ Poblenou, Diagonal, and Plaça de les Glories. In its neighborhood Clot-Camp de l'Arpa, the historic squares were renewed, and a new square Plaça Can Robacols (1987) was created replacing a series of low houses. As for Plaça Dr. Serrat was remodeled in 1989, and Plaça Sant Josep de Calasanç in 1991.

In la Verneda neighborhood, many open spaces between the numerous buildings and old factories were left without urbanization. One of its early squares is the significant Plaça de la Palmera (1985) created after demolishing an old factory. Its distinctive feature is a single palm tree that was left in the middle after developing the square by architects Pedro Barragán and Bernardo de Sola. Another distinguished element placed in the square is the sculpture, 'El Muro', the work of the international sculptor Richard Serra. It is a work of art that received mixed feelings and is formed by two concentric wavy laminas of reinforced concrete of 2.98m high, 52m long, and 25cm thick. (Remesar, Grandas, 2005; Lecea, 2006; Fabre, Huertas, 2004. Artpúblic). Following this square, the rest of the residual spaces were gradually converted into squares and gardens providing the neighbors with spaces of quality.





**Fig. 257** Plaça Sant Josep de Calasanç with the new turtle sculpture from behind in 1991 (Author, 2016)



**Fig. 258** Plaça de la Palmera with Serra's two pieces wall dividing the square (Author, 2011)

With the preparation of the Olympics, Poblenou, through special plans and the 1985 Coastal Plan, underwent the restructuring of its sea front along with the creation of Vila Olímpica that extended until Rambla Prim. With the reaching of the Diagonal to the neighborhood, part of its upper urban territory was developed like Plaça de les Glories, several new housing blocks, as well as Rambla del Poblenou where the neighbors struggled to preserve its authenticity and that of their historic center. Part of Poblenou's

sea front was built during the creation of the Vila Olímpica where the slums on the shore were removed and its beaches restructured. Generally, the construction of its undeveloped territory took the same path as the Eixample district creating a morphological extension of it. New blocks and their interior courtyards, and several obsolete factories were remodeled following the same pattern. One of the first series to be created are that of Can Torras built in 1988 with their interior gardens Jardins d'Alícia de Larrocha, Jardins de Merce Plantada, and Jardins de Creu Casas.

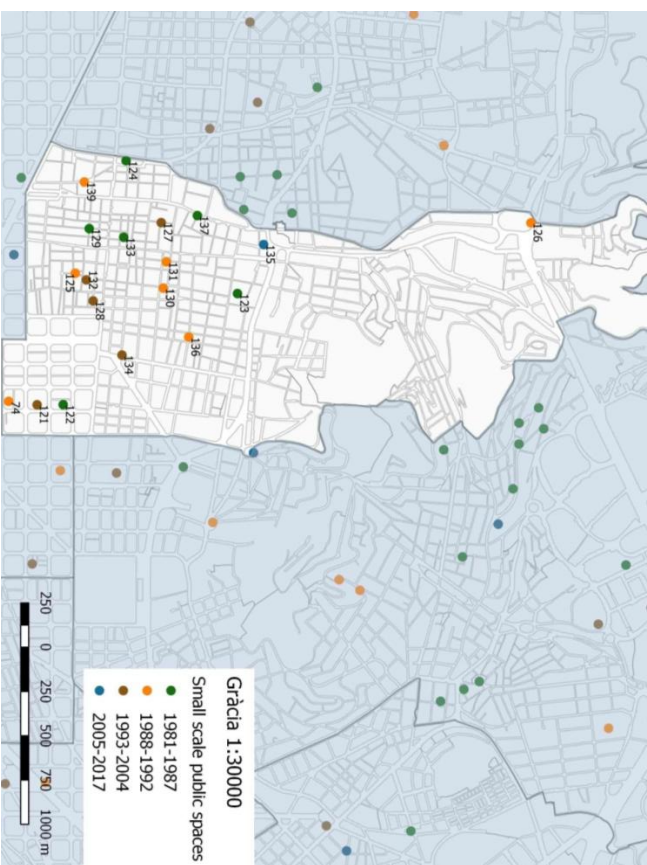
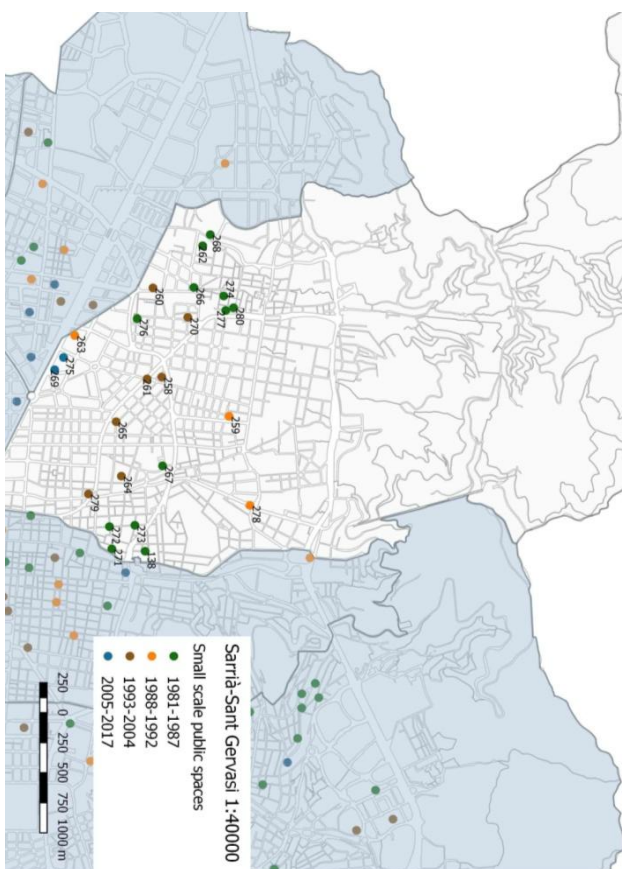
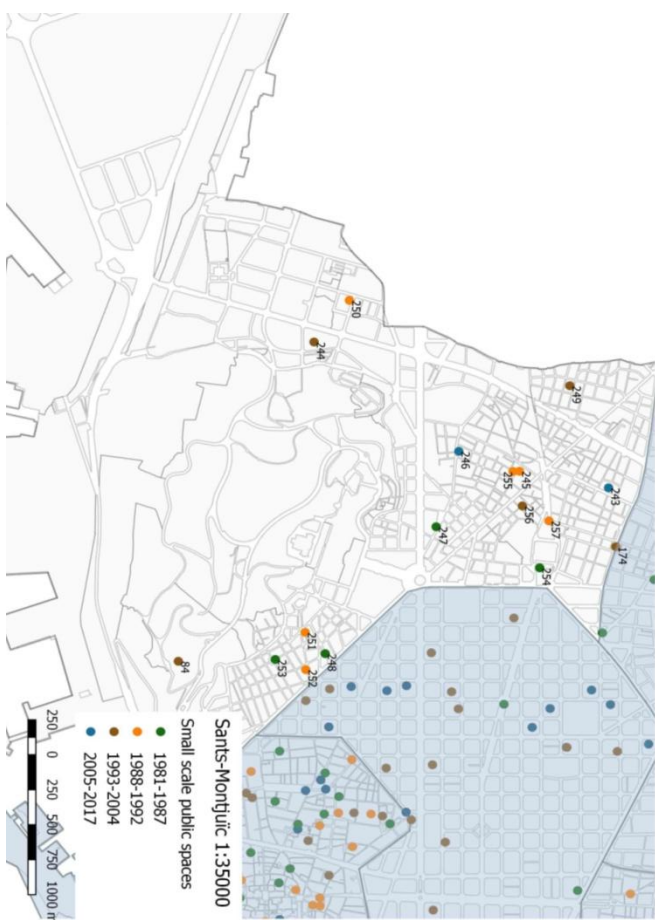
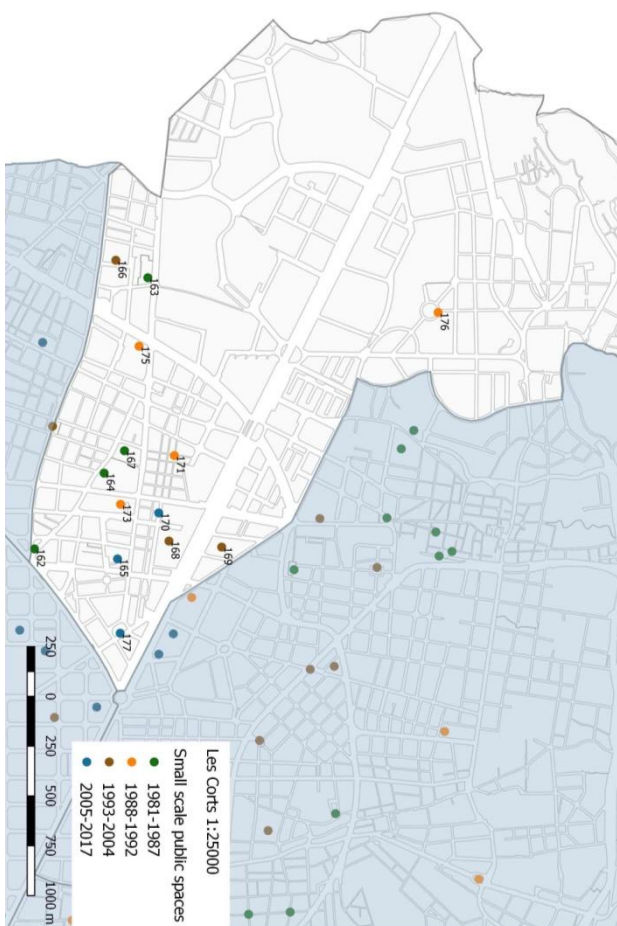
In the post-Olympic era, with the innovative projects of 22@ and the Forum 2004 mentioned earlier, the Diagonal was extended to the sea creating Parc Diagonal Mar causing the development of the area touching it like the five blocks of Front Marítim with their interior courtyards. With the project of the 22@ the territory of Poblenou was completely transformed and its obsolete factories were recycled or converted into squares leaving their chimneys as symbolic pieces of memory and identity. In addition, several new squares and gardens were created covering whole or partial blocks such as Plaça de Juli González (1995) and Jardí Gandhi (2000). However, the area of 22@ is still nowadays under development, and large areas are waiting to be remodeled with new squares and gardens where public, collective, and private use intertwine.

Such operations projected an improvement in the surroundings, provided the inhabitants with spaces of quality and prevented their displacement and exile to other areas. And as Bohigas concluded:

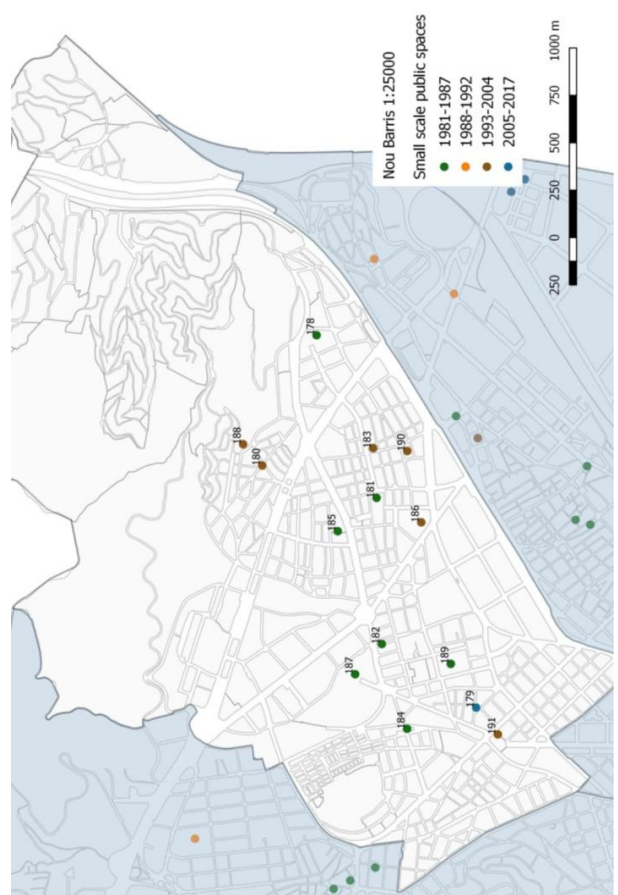
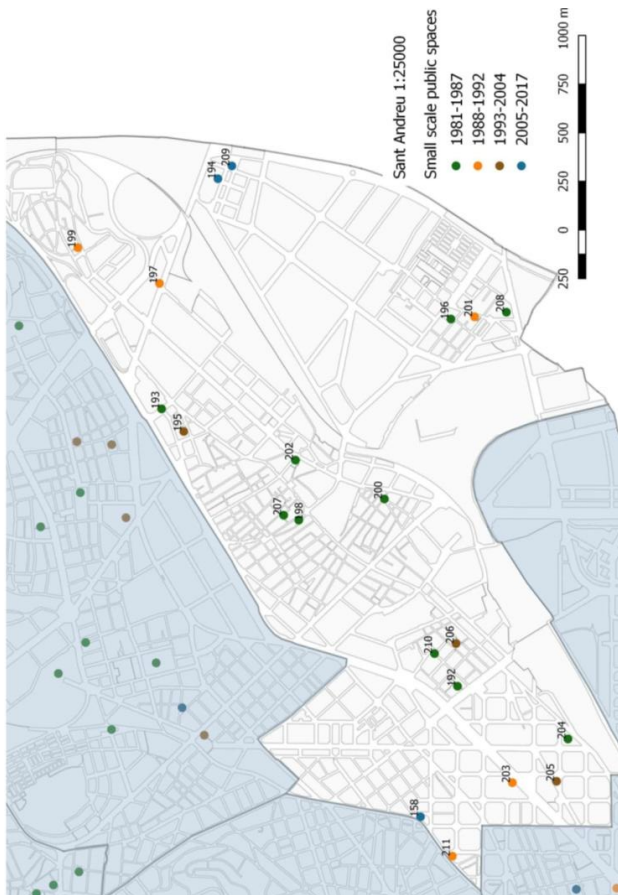
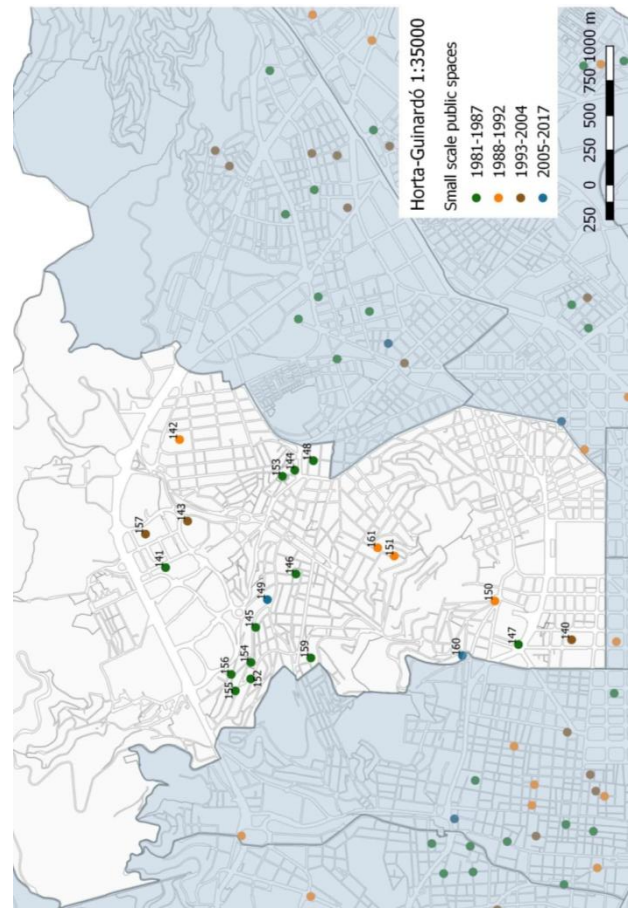
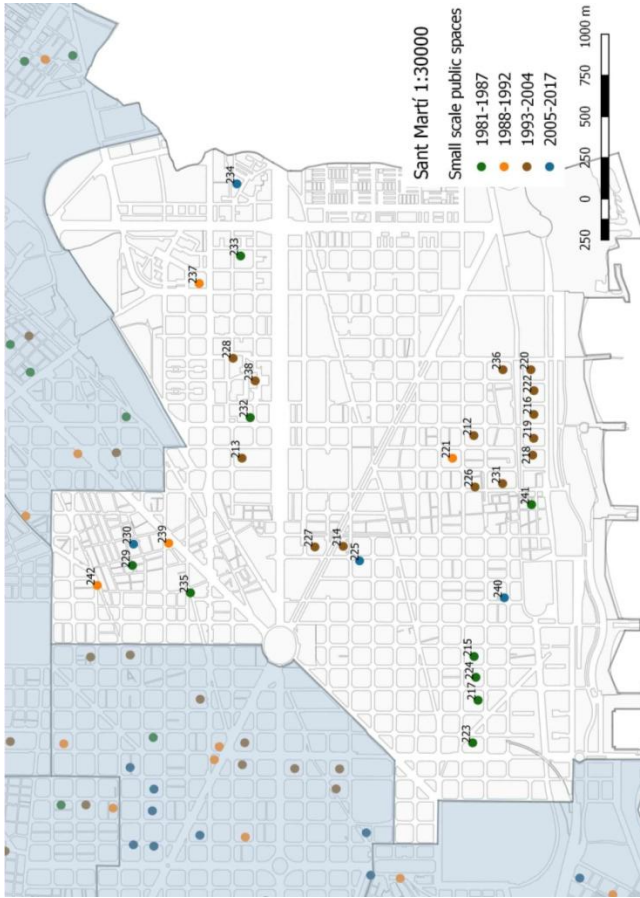
*"We must not despise therefore the monumental style [...] a style that is sometimes limited to the presence of the sculpture itself [...] to give monumental quality to public spaces in the suburbs so as to give them urban feeling and importance, and to clean up the central areas without destroying their sense of identity and historic buildings [...] In bulk of these squares [...] their monumental character in one of its two aspects, commemorative or artistic, is already bearing fruit in social cohesion through this search for, and physical imposition of formal dignity, which spread like a metastasis because it has been strategically sited."* (Bohigas, 1987: 12).







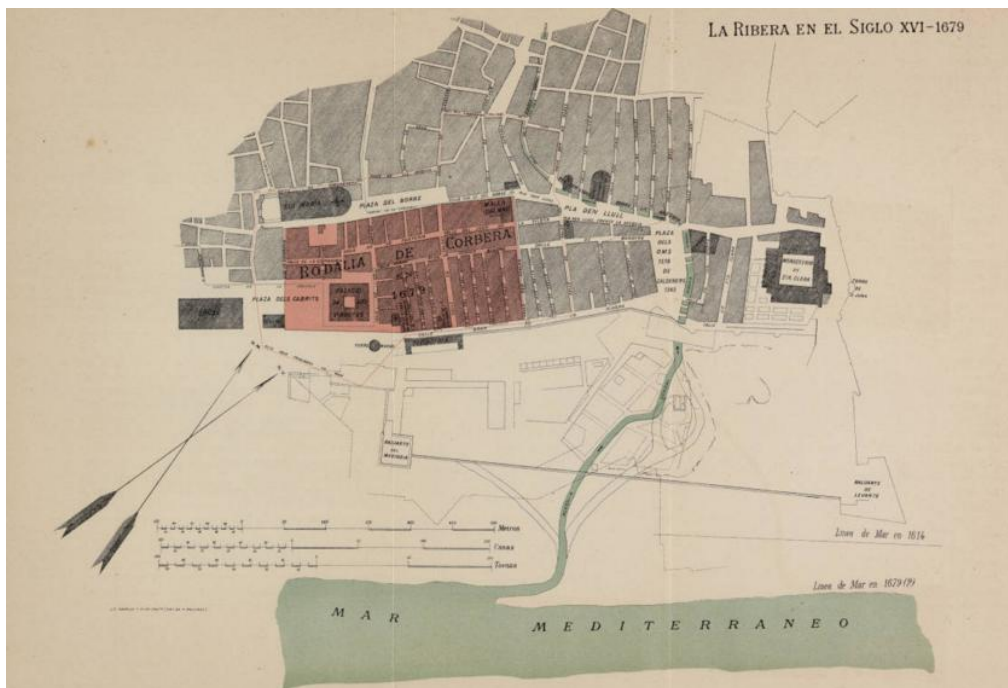
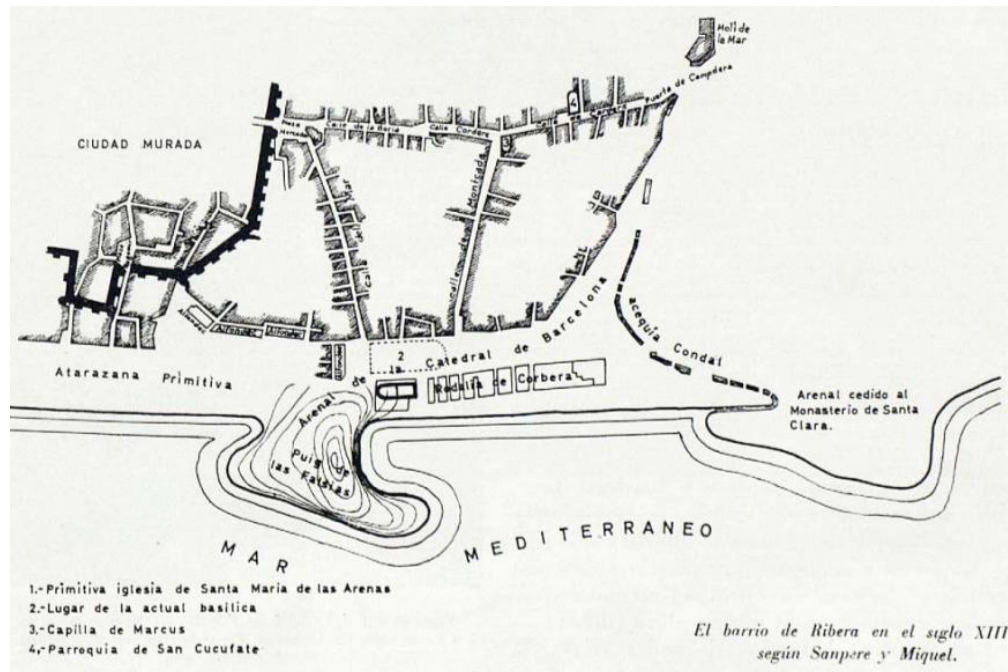




## **6** STUDY OF SMALL-SCALE PUBLIC SPACE OPERATIONS





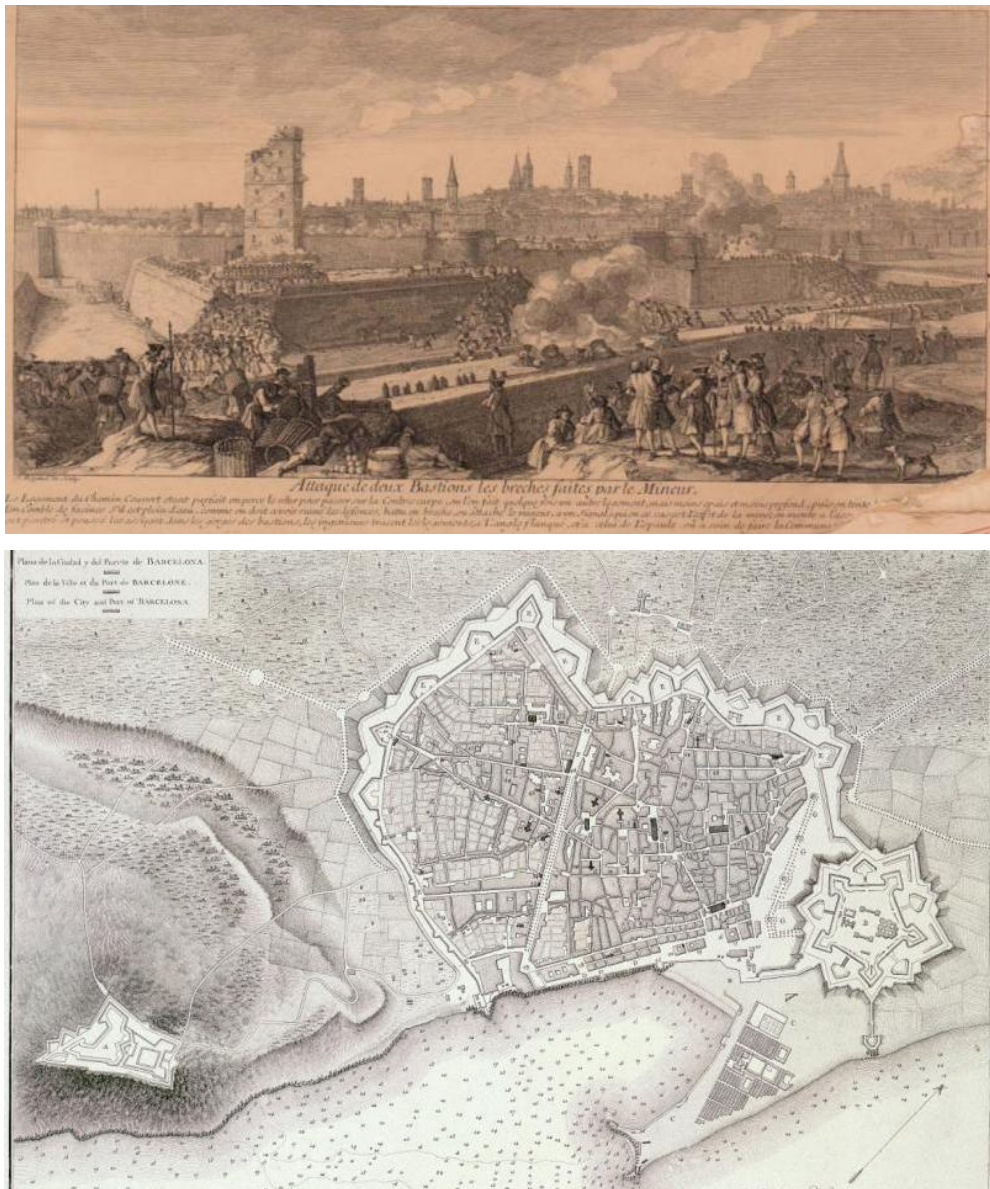


**Fig. 260** Sanpere i Miguel's Plan of the Ribera and the area of Santa Maria del Mar church in 13<sup>th</sup> century above and in 1679 below (Florensd, 1957) ( 1890, ICGC)

By the 18<sup>th</sup> century, the space consisted of a triangular space with a bridge dating back to the 1700 that connected the church to the Captain General's palace. The bridge was the only element that remained after the palace was burned in 1875.



On September 11, 1714, after a long siege and fierce resistance on the part of the inhabitants of Barcelona, the city fell into the possession of the troops of Felipe V that marked the end of the War of Succession and the loss of the old constitutional organization of the Catalan-Aragonese Crown including Barcelona's self-governmental system and the Consejo de Ciento. The patriots who fought and fell on that day were buried in the Fossar. This event triggered the demolition of 1.262 houses and 38 streets of the Ribera neighborhood to build a great fortress, the Ciutadella, by the engineer Joris Prosper van Verboom for further military control over the city. The project was approved in 1715 from which point began the construction of Barceloneta neighborhood to relocate the displaced inhabitants of the Ribera.



**Fig. 261** The Siege of Barcelona by Felipe V and the building of the Ciutadella (Rigaud, 1732. ICGC) (AA.VV. 1806. BNE)

Intra-mural burial grounds were becoming a debate of public health and hygiene in the 18th century as discussed previously in the thesis. The Royal Decree of Carlos III (1773) prohibited cemeteries inside the old towns with the possibility of turning them to open public spaces, and enabled the construction of new cemeteries away from populated areas. And similar provisions were issued by the 'Consejo Supremo' and the 'Academia Medico Práctica' in 1781 and 1787 (Monlau, 1862c; Capel, 2006). The construction of the first outer-mural cemetery in Barcelona was in Poblenou that began in 1775. But cemeteries next to parish persisted until Carlos IV took further measures in 1804 and imposed the construction of new outer-mural cemeteries.

The inhabitants of the Born took advantage of the situation to try to turn their cemeteries into public squares especially that in that year of 1804 Carlos IV and his wife María Luisa de Parma were visiting Barcelona<sup>124</sup>.

In addition to the Fossar there was another cemetery at the church's main entrance – nowadays Plaça Santa Maria del Mar– and the neighbors were complaining about the danger of infections and accidents. In 1802 they presented to the General Captain a memo of the possibility of turning the site into a public square arguing that it will provide comfort, safety, and health. Moreover it will facilitate commerce, traffic and carriages, and provide a relief from the adjacent narrow streets without disrupting the flow of traffic and pedestrians. In his turn, the General Captain admitted their memo to the City Council.

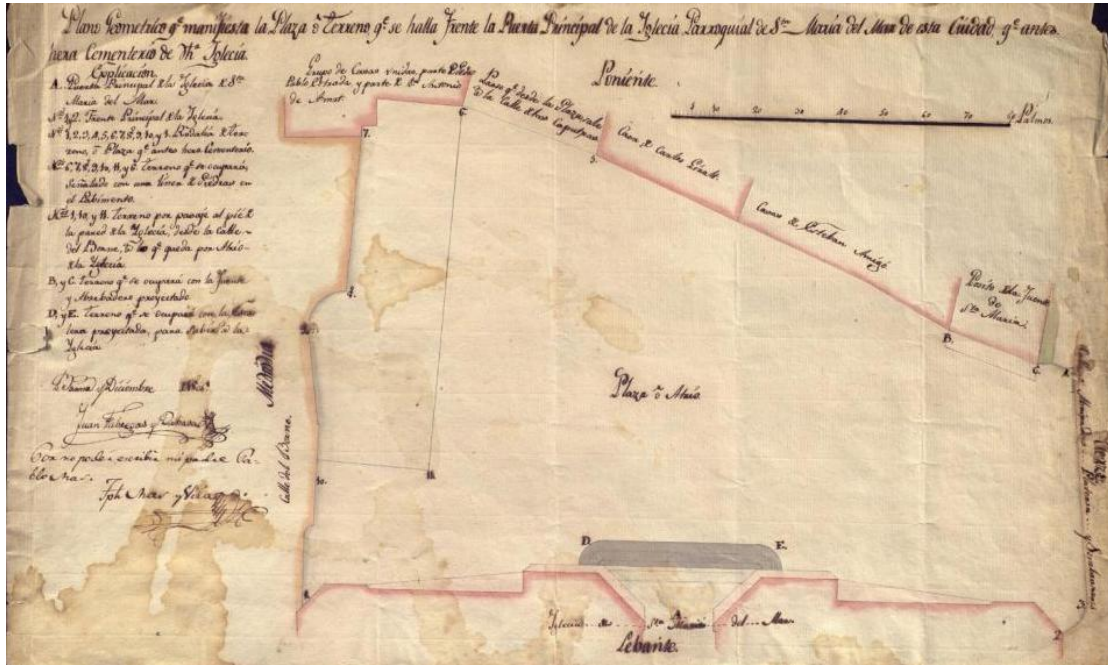
As for the 'Junta de Obras de la Parroquia de la Iglesia' reasoned that the area of the cemeteries should be free of traffic and pedestrians for the welfare of the priests and church and insisted on the fatal dangers that the exhumation process could cause on public health. Despite the debates and proposals between the neighbors and the Junta, the City Council persisted on exhuming both cemeteries. The City Council's interest was mainly for the health of the monarchs especially that the Fossar de les Moreres was under the bridge that connected the church to the Palace. However, it was not until 1806 that the matter was resolved and an agreement was signed between the City Council and the Junta with fair compensations for the latter (García Sanchez, 2003; Brotons, 2008). Therefore, during the visit of Carlos IV in 1804 both cemeteries were closed and concealed. The Fossar remained functioning as a cemetery until 1819-1820 where it was exhumed and completely paved.

Except for a series of one-storey dwellings constructed in the triangular shape of the square, it mainly remained in the same state throughout all the changes and evolution of the city: the demolition of the Roman Walls (1845); the extension of the city with Cerdà

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<sup>124</sup> His visit also entailed necessary arrangements and alignments of the city's streets and buildings.

Plan; the demolition of Ciutadella<sup>125</sup>; the 1888 Universal Exposition; and the different reform plans of the old town including opening the Via Laietana.



**Fig. 262** Josep Màs Vila, on behalf of his father Pablo (1806). Geometric plan showing the square or ground in front of Santa Maria del Mar's main door, and which was the cemetery of this church. (Màs Vila, 1806. AHCB) Carreras Candi said of Josep Màs “una insignificant minoria dotada de bon seny y que, per aquests anys, entaula una lluyta titànica ab lo Municipi, supeditat per lo Mestre Joseph Mas y Vila. Ell sigui principal responsable d’ un sens fi de sacrilegis artístichs. Entra a ocupar son carrech per la porta del favor. En 1800 comenya ajudant a son pare Pau Mas y Dordal. qui, junt ab un séu germa, exerciren de mestres d’ obres y fontaners municipals de de 1758” (Carreras Candi, Francesc 1916: 839).

<sup>125</sup> A symbol of punishment and oppression on the city, the citizens always aspired to demolish the Ciutadella. In the early 19<sup>th</sup> century various urban improvements were made around the fortress like avenues and gardens (Passeig de l’Esplanada 1797) (Jardí del General 1816) (Villoro, Riudor, 1984). The first failed attempt to demolish it was in 1841 after General Espartero came to power, but the failure of the coup in Pamplona stopped the initiative and the City Council was forced to reconstruct the demolished part, a work that lasted until 1850. Four years later the city’s Roman walls were approved for demolition. The reality of destroying the Ciutadella happened after the revolution of September 1868 with General Prim approving the decree to cede the fort to the city with the condition of the City Council delegating the demolition costs as well as turning the land into a public park. It was Antoni Rovira i Trias who supervised the demolition that started with the tower of Sant Joan the military prison located in the Plaça d’Armes. It lasted between 1869 and 1884 during which the ‘Comisión de Ciutadella’ called for a contest of projects for the park in 1871. There were several proposals including that of Garria i Roca and Josep Fontserè i Mestre who was awarded the management of works collaborating with the committee formed by architects Elies Rogent, Joan Torras i Guardiola and Rovira i Trias. And the decision to assign the 1888 Universal Exposition on the grounds of the Ciutadella area was to enhance and increase the works on the park that was still under construction. The works lasted until 1886 after which Fontserè was replaced by Elies Rogent to prepare for the Expo.



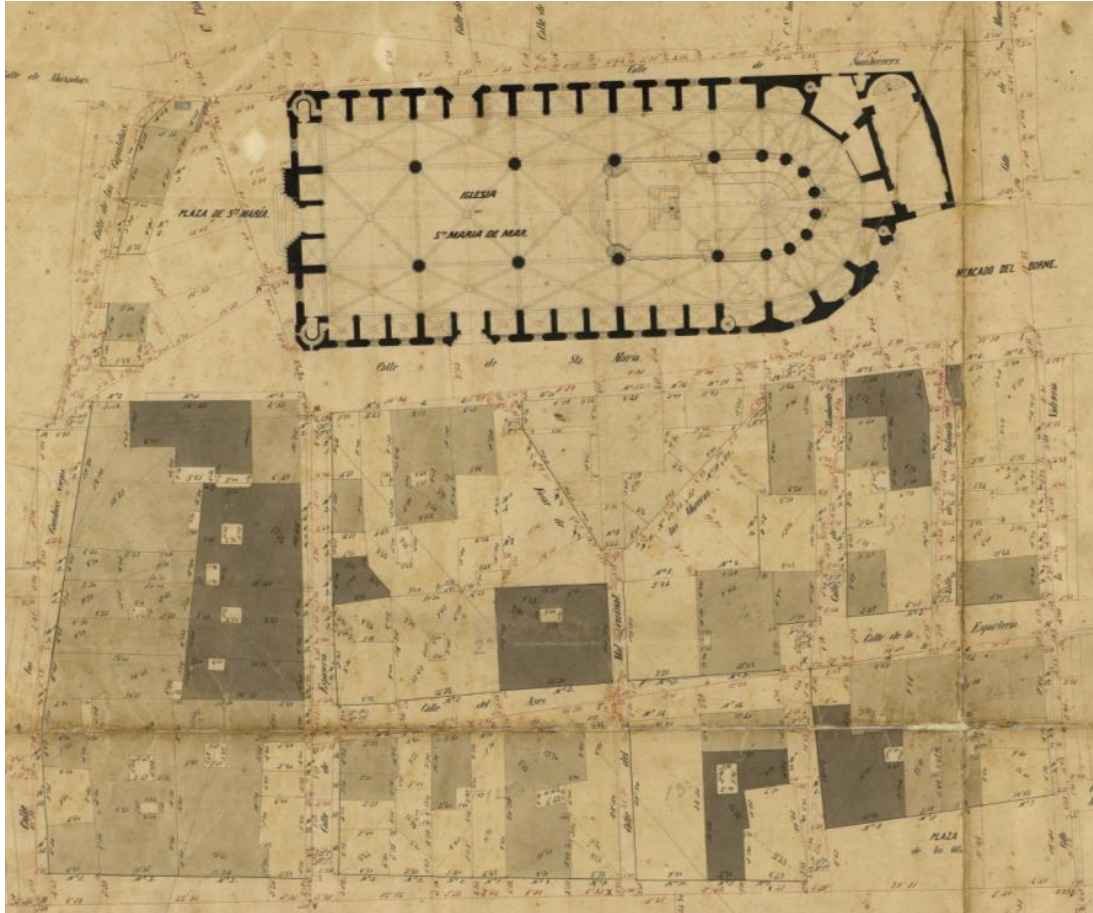


Fig. 263 Garriga i Roca's Quarteron of Santa Maria del Mar and the Fossar (Garriga i Roca, 1858. AHCB)

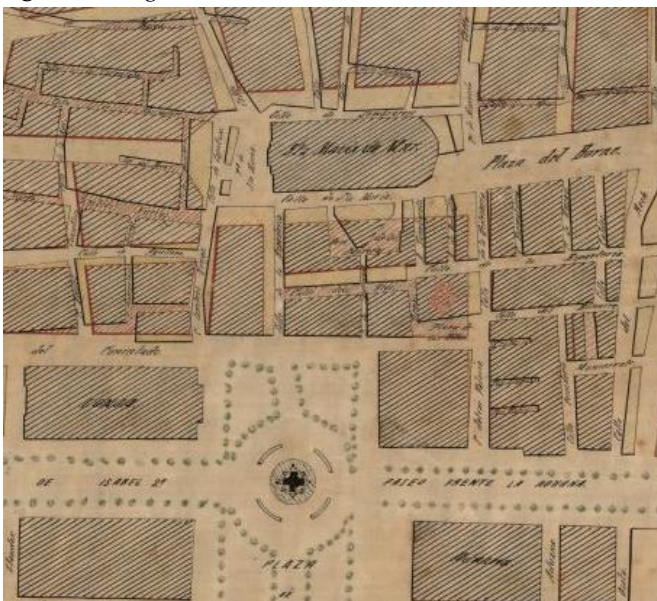


Fig. 264 A piece of Cabañes's plan of the same area (Cabañes, Abril, 1880. AHCB)



Fig. 265 View of the bridge passing over Santa Maria street into the Fossar (Baixeras, 1909. AHCB)



Celebrating the 'Diada de l'Onze de Setembre' began in 1913 when the 'Comisión Unitaria de la Diada' participated in the floral offerings on the sculpture of Rafael Casanova<sup>126</sup> for the first time and deposited a bronze crown on the top of the statue.

In 1915 the square was urbanized and repaved with a couple of the one-storey constructions in its triangular space demolished leaving a small open space among the narrow streets.

With the dictatorship of Primo de Rivera starting in 1923, celebrating the Diada was impossible until April 1931 when it was regained again with the Second Republic and kept its splendor until the Civil War and the second dictatorship of Franco when it was totally erased from the official memory for forty years.



**Fig. 266** Monument a Rafael Casanova. Offering florals to the monument still in 1913 located under Arc de Triomf before being moved in 1914 to its current place in Ronda de Sant Pere with Carrer d'Ali Bei (Ballell Maymi, 1913. AFB)



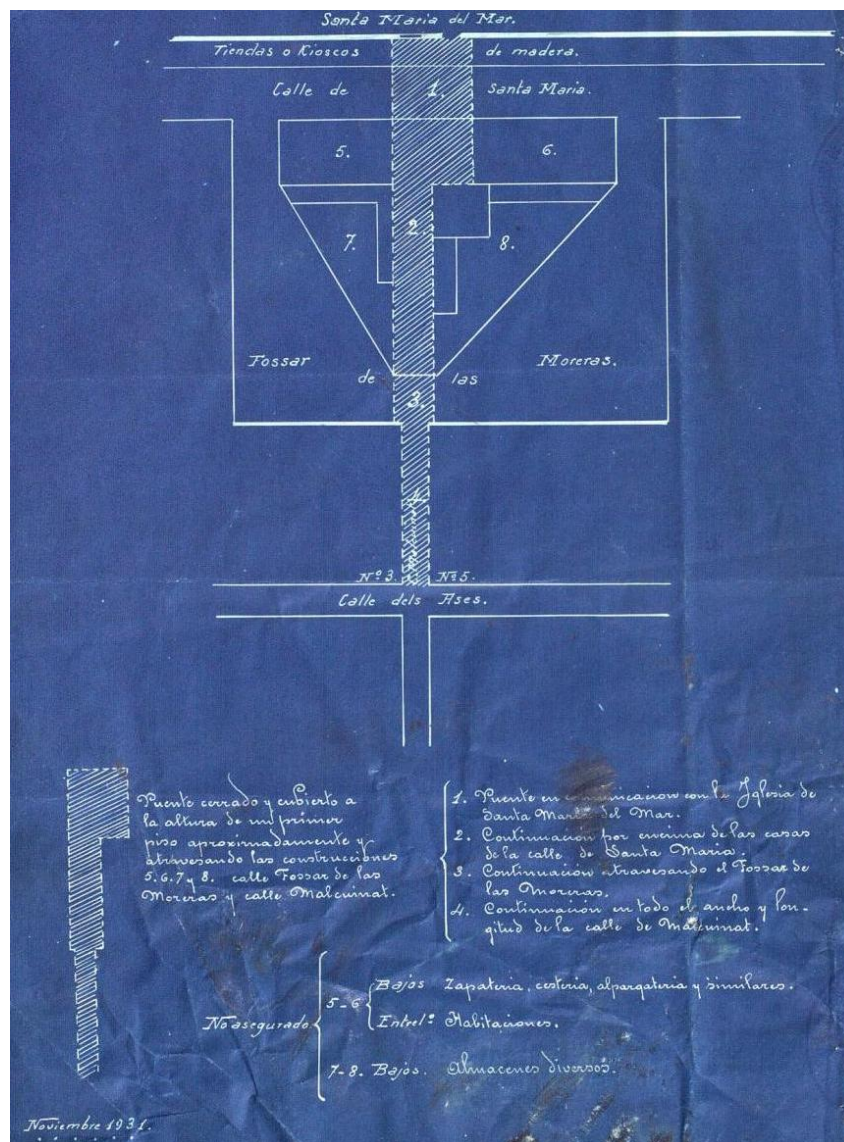
**Fig. 267** The Diada de l'Onze de Setembre in 1915 with Martí Julià, president of the Unió Catalanista, explaining the meaning of the new uncovered plaque in the Fossar (Ballell Maymi, 1915. AFB)

In 1957 the restoration of Santa Maria del Mar had began, and as Florensa pointed out, it was decided to free the church's apse from the constructions that were hiding its façade. This matter gave a church a better perspective from Passeig del Born and improved the entrance to Carrer Montcada. The constructions consisted of small houses, shops and the

<sup>126</sup> Rafael Casanova was a jurist, lawyer, mayor of Barcelona, and commander in chief during the siege of Barcelona and was wounded on 11 September 1714.

chapel of Sacramento that caused difficulties in expropriation especially the chapel. While working on his proposal of the Ribera neighborhood in that year, Florensa landscaped the Fossar proposing a possible solution by moving the chapel to the empty space of the Fossar and could be reached from the main church by a bridge lower than the existing one and by another stairway access:

*"Situamos la nueva capilla del Sacramento en el vacío del antiguo Fossar de las Moreras, llegando a ella por un puente bastante más bajo que el actual y con acceso por una de las capillas laterales, en la que se alojaría una escalera recta prolongada sobre parte del puente. La solución, repetimos, es posible, Pero como es natural, depende del acuerdo con las autoridades eclesiásticas y con la Junta de Obra, más poderosa en Santa María que en otros templos" (Florensa, 1957: 20).*



**Fig. 268** A render drawing of the bridge crossing the small buildings in the square (Ajuntament de Barcelona, 1931. AHCB)





**Fig. 269** The façade of the church with the windows, houses and shops built right against its walls (Unknown, 1905-1915. AFB) Below a zoom in on the area of the square from Florensa's Ribera proposal (Florensa, 1957)



In 1966, Mayor Porcioles suggested tearing down the bridge in order to clean the façade of Santa Maria del Mar as well as several other adjacent buildings, but the project was never carried out (Tarin-Iglesias, 1966-11-03). A few alignment operations happened in the buildings surrounding the square but apart from that it fell into a long period of degradation and served as a car park like the rest of the squares in Ciutat Vella at the time:

*"[...] el Ayuntamiento se dispone a acometer unos trabajos de reordenación de la cintura de edificios que rodea a la basílica de Santa María del Mar, con el doble propósito de realzarla y destacarla y de comenzar a crear en el barrio la descongestión que preconiza un plan urbanístico ya antiguo. Las tareas actualmente proyectadas se centran en dos puntos: la demolición de la casa adosada al ábside de la basílica, que está oculto por ella, con grave daño de la estética global del templo, y el despeje del «Fossar de les Moreres», paraje dotado de tantos valores plásticos como históricos, donde se alzan ahora diversas construcciones adventicias" (LVG, 15-11-1966).*

After the death of Franco, the year 1976 marked the first public act of the 'Diada' after the fall of the dictatorship and became a real outburst of freedom, and political and social integration in demand of national liberties and self-government. A massive march followed on the same date in 1977 demanding the restoration of the Generalitat de Catalunya, and once again the Fossar became the Diada's point of concentration while the commemorative plaque, which was removed in 1939, was returned.

With the rise of the neighborhood associations in the whole city, the 'Associació de Veïns del Barri de la Ribera', the newly formed 'Comissió Pro Fossar de les Moreres-Memorial 1714, and the 'Òmnium Cultural' wished to improve and dignify the Fossar that was in a deep state of degradation, and to recover it as a symbol of Catalunya.

The City Council with the support of the political parties and neighbors began to pose the first alternatives of restoration and urban recovery of the space. They prevented vehicular traffic, since the place was used as a parking, and began by paving the space. While replacing the old sewers, archeological and human remains were uncovered, collected, and transferred to the History Museu, which led the excavation works to be stopped and the space to be enclosed for several years.

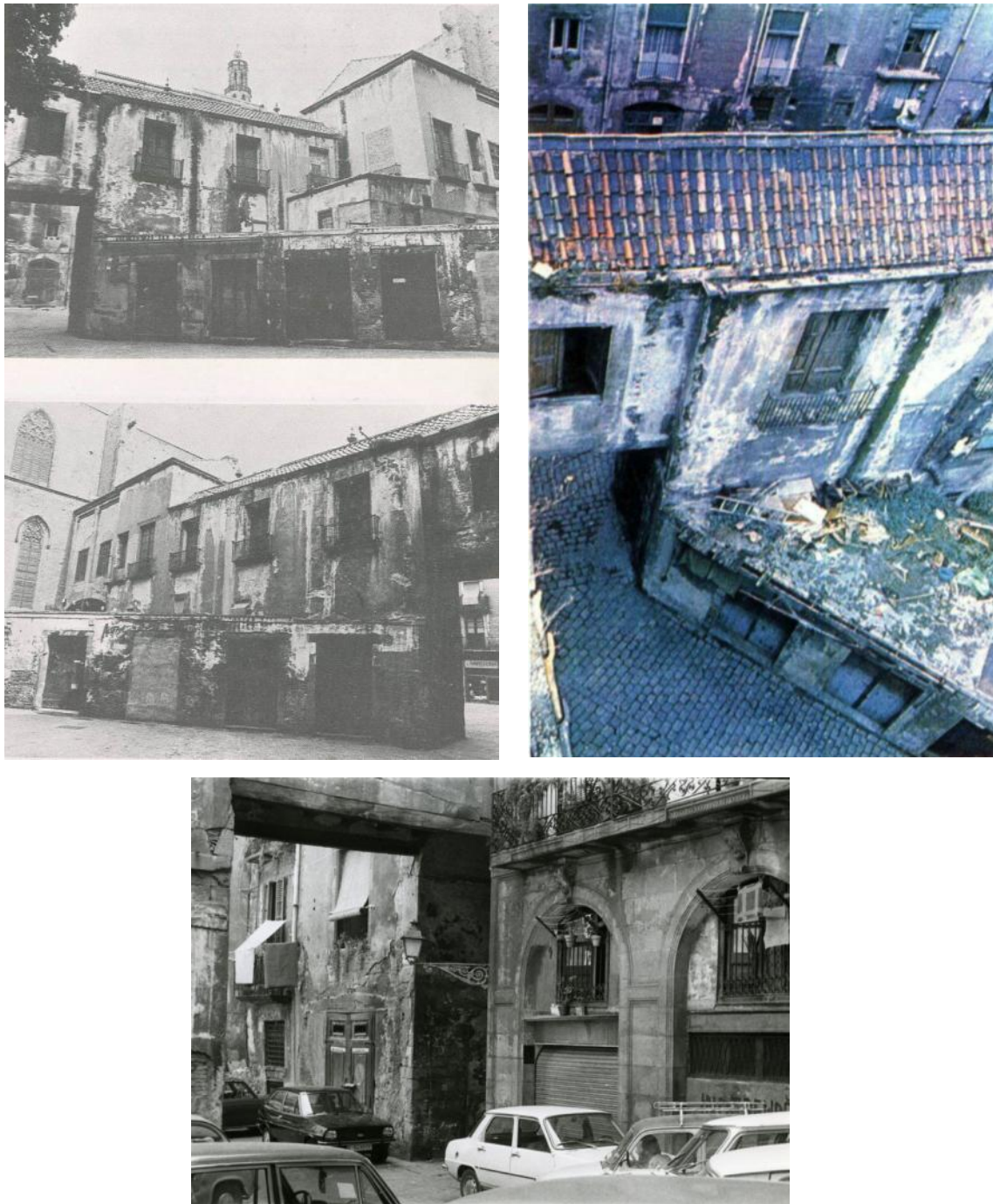


**Fig. 270** Placement of the commemoration plaque in the square in 1977 (Manen, 1977. AFB)

**Fig. 271** The day of the Diada demonstration in the square in 1977 with the bridge and houses still in the square (Brangulí, 1977. AFB)







**Fig. 272** Views of the square's degradation and occupation by vehicles (Bohigas, 1987) (LVG, 1977-10-11) (Robert, 1977. AFB)

While describing the space and its surroundings, Remesar wrote that: *"However, from the standpoint of public space, the site is disordered. There is a strange mixture of small houses used for a variety of trade activities occupying the centre and the remains of the bridge built into the basilica that was meant to link the royal palace to the Pla de Palau square. It may be a symbolic*

*place, but it is not an urban space, conveniently laid out and developed as a square” (Remesar, 2004, artpúblic).*

During the first years of the 1980s when many strategic spaces in the city were converted into small-scale squares, the first and original proposal for the Fossar began between 1981 and 1983.

The preliminary proposal drafted by Lluís Domènech and Roser Amadó was part of the PERI of the Ribera where many public spaces were being regenerated and remodeled including the area of Passeig del Born and Passeig Picasso to improve the communication with the Ciutadella (Bohigas, 1983). Passeig Picasso was redesigned and its circulation restudied and connections enhanced. Streets and public spaces in the Born area were prepared for pedestrians, remodeled, and repaved including Fossar de les Moreres (Ajuntament de Barcelona, 1981).

*“En toda la intervención que detallamos se tiene en cuenta el numero de peatones con el transito lento de acceso, intercalando las cualificadas superficies pavimentadas para peatones de Santa María, el paseo y el Born con los estratégicos puntos de acceso de la calle del Rec, Canvis Nous, las calzadas del paseo, etc.” (Bohigas, 1983: 92).*

Lluís Domènech and Roser Amadó’s proposal of the square had a 30 million pesetas budget and consisted in replacing the existing one-storey buildings with a triangular garden enclosed with a 3 meters high wall. As for the deteriorating bridge, it was thought to disassemble it by numbering every piece, restore it, and reconstruct it in its former place (Sierra, 1987-20-08). The bridge would be floating on the enclosed garden –which evokes a closed cemetery – in which commemorative plaques will be placed on the grass and shaded by mulberry trees. By conserving the triangular form of the square, the architects respected the existing pavement renovated a few years ago from slabs of Montjuïc stones. The wall is treated with similar materials and three large openings visible from the church.

To support the bridge, a solution was found based on a kind of wood structure that relates to the Ribera’s old traditional over-hanged ‘voladizo’ balconies and eaves:

*“Uno de los problemas más difíciles de resolver era el soporte del puente. Finalmente se encontró una solución basada en una estructura de madera que, si bien es actual, entronca de alguna manera con la tradición de los balcones y aleros de la antigua arquitectura del barrio de Ribera. El diseño de este elemento estructural obedece tanto a razones de cálculo como a criterios compositivos, como es el caso de la asimetría de los dos elementos sostenedores que nos permiten una salida limpia a Santa María sin perder la simetría en el espacio interior del recinto y de los balcones” (Bohigas, 1983: 92)*

At the same time, the ‘Memorial 1714’ presented an alternative design elaborated by architect Jesús Rocañin i Serrano and supported by a number of civic associations. He proposed the demolition of all one-storey constructions creating an open space with the bridge restored and supported on three arches, and in a corner installed a raised platform in a pyramid shape above which would be placed a flame.



Fig. 273 The over-hanged balconies of Ribera neighborhood (Florensa, 1957)

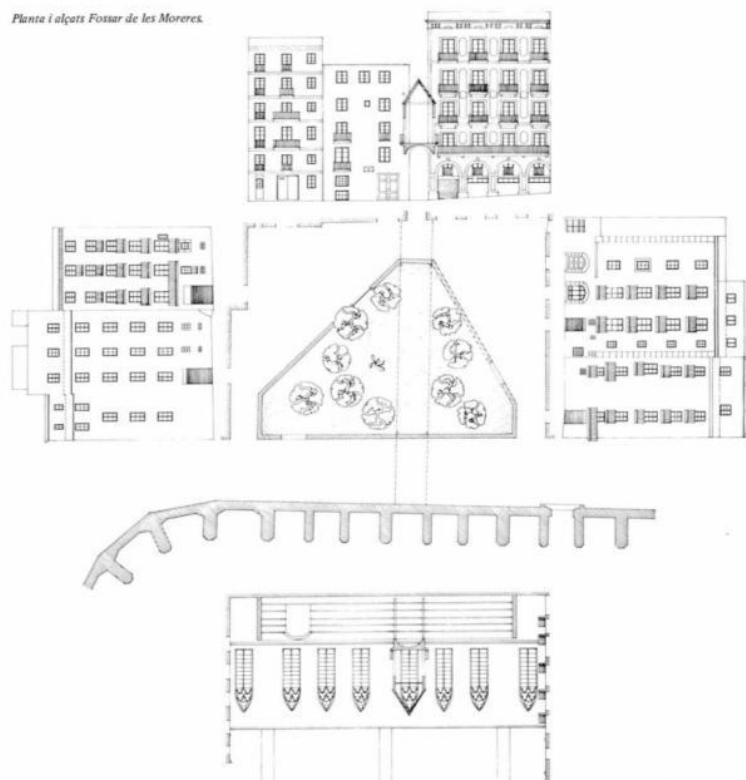


Fig. 274 Domènech and Amadó's preliminary draft (Bohigas, 1983)



From then on began a six years political controversy between the 'Memorial 1714' and the 'Comissió Pro Fossar de les Moreres' one side and the City Council on the other. Discussions among the groups and appeals were made to the Generalitat to approve the alternate proposal to be then rejected by the City Council. Finally an agreement between the groups was achieved through the 'Síndic de Greuges' (Sierra, 1987-20-08).

In the end, the project endorsed by the City Council was imposed, and the Síndic de Greuges obtained a principle of agreement between deputy mayor and planning director Jordi Parnal, the Generalitat's heritage director Esteve Màs, and the Memorial 1714 according to which the latter would constitute a commission to monitor the execution works (Castro, 1986-04-06).

In 1986 the bridge<sup>127</sup> was dismantled and the rearrangement of the area began. The bridge's demolition left the façade of Santa Maria del Mar exposed with a spectacular view, the fact that surprised everyone. The perspective of the great Gothic wall changed the approach to Domènech and Amadó's project. It was decided to keep the façade free and not reconstruct the bridge which meant re-planning the whole project. Therefore, the execution work on the square was halted awaiting a new proposal. The Fossar was closed yet once again to be opened temporarily for the annual Diada (Sierra, 1987-20-08).



Fig. 275 Rocañin i Serrano's perspectives of his proposal (Memorial 1714)

<sup>127</sup> It was not the first time the bridge got dismantled along its history. It was destroyed in 1823 and reconstructed in 1827.



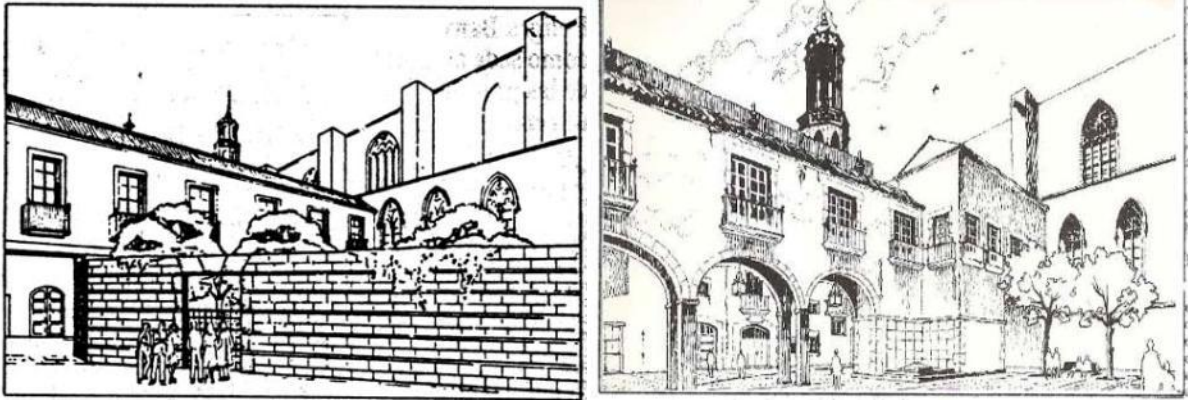


Fig. 276 The same perspective of both projects; Domènech and Amadó, and Rocañin i Serrano (Castro, 1985-06-23. LVG)

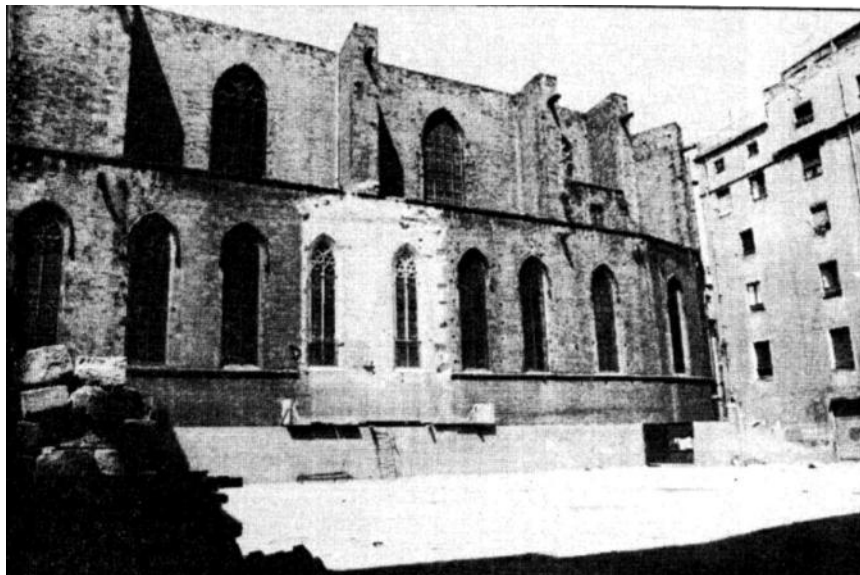


Fig. 277 The exposed façade of Santa Maria del Mar after demolishing the bridge (Sierra, 1987-08-20. LVG)

In 1989, two years later, a new remodeling project was drawn up by architect Carme Fiol, with a budget of 32 million pesetas, which has satisfied all involved parties; the Generalitat, City Council, Memorial 1714, and neighborhood associations. For Fiol *“the idea is for the square to be a leisure area, but with a certain monumental feel”* that respects the dignity, symbolic and patriotic character of the place, principles already agreed upon by the involved parties and the Parliament’s cultural committee back in 1986:

*“[...] se aprobaba una proposición que indicaba que a remodelación del Fossar se llevase a cabo teniendo en cuenta los principios siguientes: que se respete el carácter simbólico y patriótico del lugar y que haya constancia de este carácter; que el recinto “pueda ser visitado cómodamente”; que aparezca una explicación detallada de los hechos que allí sucedieron; y que, tras la remodelación, se mantenga la dignidad que corresponde al recinto”* (Sierra, 1987-20-08: 13).

The result of the design is an approximately one thousand meters squared (989m<sup>2</sup>) open space bounded by a 0.6 meters high and 30 meters long wall, between the square and Santa Maria del Mar, of red granite brought from USSR with the same granite used in Lenin's mausoleum. This wall increased the square's monumental feeling and its surface is complemented with an inscription from Serafi Pitarra's verses *dedicated to the martyrs of 1714, the same ones inscribed on the plaque: "Als Màrtirs de 1714: Al fossar de les Moreres no s'hi enterra cap traïdor; fins perdent nostres banderes serà l'urna de l'honor."*

The polygonal shaped area, where once was the cemetery, has a concave amphitheatre-like form and divided into several triangular sectors paved with inclined red bricks of 20x10x4.5 centimeters unfinished with broken edges and separated by a 2 centimeters sand plaster. They converge in the center, near the red wall, where a circular drain is placed symbolizing the spilt blood from the battle. The triangular brick lines create a kind of axis or focal point towards Santa Maria del Mar as well as Carrer Malcuinat on the opposite side. The surface's topographical differences and change in levels accentuates the symbolic presence of the square. This play in levels and perspectives is emphasized by the lines of shadows that vary throughout the day (Cáceres, Ferrer, 1993).

The existing pavement around the polygonal limit is preserved and is characterized by 15x20x8 centimeters of grey sandstone cobbles and 60x40x3 centimeters of sandstone slabs made from Montjuïc stones. They trace and echo the history of the place, creating an interesting texture and contrast with the red color of the bricks and granite. On one corner of the square, three mulberry trees, 'Moreras', are planted (Cáceres, Ferrer, 1993; Remesar, 2004; Fabre, Huerta, 2004; Caballero, 1989-01-10).

As for the lighting, the inscription is illuminated through light strips placed along the base of the wall. The lighting of the space is limited to street bracket lamps, the same model found all around the neighborhood, mounted on the façades of the buildings that define the perimeter, which gives the place at night an intimate and somber atmosphere. As for the façade of Santa Maria del Mar, which is the most appropriate for the memorial, it is illuminated by spotlights located in the corners of the square and Carrer Santa Maria (Cáceres, Ferrer, 1993).

Lluís Permanyer commented on the square in his article in La Vanguardia that:

*"A la arquitectura Camre Fiol se debe una reurbanización ejemplar: orilla la demagogia, valora la grandeza de lo humilde, invita a la reflexión. Porque el Fossar de les Moreres es el homenaje a los héroes anónimos, nadie ni nada protagoniza el espacio; porque los recordados yacen bajo tierra, el nivel no sólo recoge la inclinación natural de la plaza sino que marca el descenso acusado; porque los hombres del Onze de Setembre dieron su sangre por la patria, este Fossar es desde ahora la única gran mancha roja estampada sobre Ciutat Vella; porque lo anónimo y lo humilde también es grande en arte, el adoquín viejo y ciudadano pero sobre todo el ladrillo alcanzan fuerza plástica al ser empleados con maestría; porque el desplome del pasillo aéreo y principesco descubrió la fuerza del muro sillar, ahora nos es dado admirar una perspectiva inédita de Santa Maria que remata con grandiosidad una plaza bien especial"* (Permanyer, 1989-10-14 : 23).

Lecea tackles the relationship between public art and the architectonic public spaces in the democratic era with respect to memory and commemorative content pointing out that it was time to confront the reminiscent content that had been raised by Oriol Bohigas and which until then had only been contemplated in two spaces of extraordinary sensitivity designed exclusively by architects (referring to the Fossar de les Moreres and Fossar de la Pedrera):

*“Se trata del Fossar de la Pedrera, obra de Beth Galí, entonces arquitecta municipal, que convierte en un impresionante jardín la antigua fosa común del Cementerio de Montjuïc para recoger los restos de Lluís Companys [...]; y del Fossar de les Moreres, obra de Carme Fiol, también entonces arquitecta municipal, homenaje a los heroicos defensores de la ciudad durante el sitio de 1714. Ambas obras ilustran que la conmemoración y la memoria son posibles en un lenguaje radicalmente contemporáneo” (Lecea, 2006: 25).*







**Fig. 278** Both pictures showing the new design of Fossar de les Moreres and the game of levels and angles of the triangular space (Ajuntament de Barcelona. 1989. AFB) (Cáceres, Ferrer, 1993)

In 2001, a new element or symbol was introduced to the square facing Santa Maria del Mar church. It is a torch or incense burner designed by Albert Viaplana. It is a well designed 15m high iron structure painted in the same red color as the pavement with an eternal flame fed by the 'Gas Natural' pipes. However, the torch witnessed some criticism from the neighbors claiming that they had not been consulted and that Carme Fiol's design was perfectly acceptable and required no additions. Fiol, considered it as a flagrant violation of her project that was designed as a public space with a high symbolic value; a square and a monument at the same time (Remesar, 2004. Art públic).





**Fig. 279** Views of the square nowadays with Viaplana's flame structure (Author, 2011)







Fiol's 30m long x 0.6m high granite red wall with the inscriptions



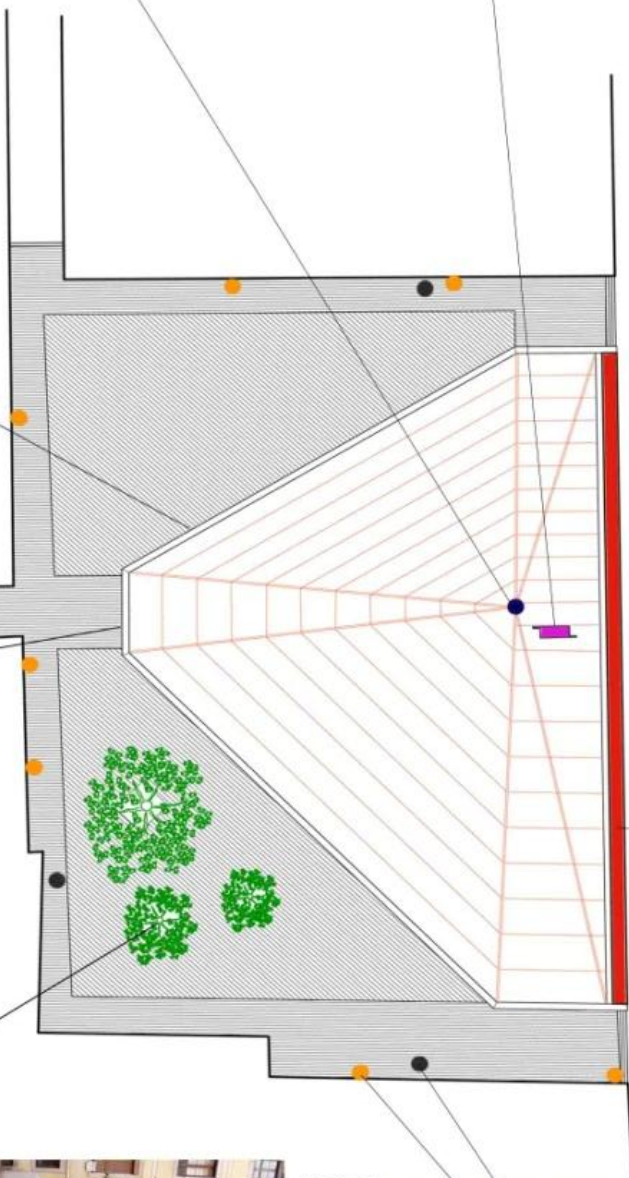
Metal grey garbage bin 60x220cm. A Benito main model used in the city. 3 items placed discreetly on the edges of the square



Replicas of 19th cent. wall brackets. Benito model Villa. 7 items



The three mulberry trees "Morenes" placed on one corner of the square



Combination of 20x10x4.5cm red bricks with 15x20x8cm sandstone cobbles separated by a line of drains



Red bricks combined with 40x60x3cm sandstone slabs



30x60x8cm concrete slabs



Viaplana's 15m high iron structure with a torch that was added in 2001



Circular drain where the floor converge of approximately 60cm diameter



The square had a significant effect on its adjacent surroundings by first, causing the opening of Carrer Malcuinat which allowed a direct access to and from the square to the Pla del Palau, and second, the restoration of the buildings located in its perimeter that were extremely deteriorated.

Moreover, different expectations were generated for the buildings' ground floors, even Fiol suggested that some should be set up as a small museum that includes the square's history or they could house the old bridge's remains (Caballero, 1989-01-10).

Since January 1989, they intended to rehabilitate the façades of the surrounding buildings and a 'Plano del anteproyecto de rehabilitación' (Preliminary rehabilitation plan) for the façades was realized by J.M. Casanovas and A. Fontanella through the 'Unidad Operativa de Proyectos Urbanos', but the proposal remained on paper. Another attempt was in 1994 when the City Council, the Generalitat, and the Government signed an agreement to help in rehabilitation works in the Fossar as well as in several areas in Ciutat Vella (Juan, Miquel, 1994-11-11).



**Fig. 280** The 'Plano del anteproyecto de rehabilitación de las fachadas' by the 'Unidad Operativa de Proyectos Urbanos' in 1989 (Ajuntament de Barcelona, 1989)

It was in 1998 that the rehabilitation of the buildings had started. The buildings, in general, lacked a special interest: one had relief molding designs; number 10 had some 'esgrafiados' or sgraffito –a common historic façade treatment in the city– and was many centuries ago was Hostel of Santa Eulàlia; and the rest had different paints and colors. Building number 2 holds the museum of the Memorial 1714 which opens every 11 September. However, they were all found in a poor state that impoverished the whole place. And their interior situation hidden behind the painted façades was worse. The rehabilitation had an estimation of 156 million pesetas from which 30% would be paid by subsidies granted by the Governement and the Generalitat to Ciutat Vella's rehabilitation projects; 20% would be covered by the 'Institut Municipal de Paisatge Urbà'; and the



other half left would be financed by private capital (Ricart, 1997-11-11) like PROCIVESA, Closa Alegret, and Marks & Spencer. The owners, tenants, and the Memorial 1714 also were making contributions.

However, the estimated budget soon over-passed from 150 to 250 million pesetas which stopped all rehabilitation works (Sierra, 2001-06-08).

In 2001, neighbors started complaining of water installation problems, of leaking, dampness, stains emerging from newly painted façades, and even structural problems. To let their voices be heard, some neighbors hanged bed sheets and banners denouncing the state of the buildings's interiors with the slogan: "*Posa't guapa per fora i per dins*" and "*Detrás de una fachada pintada hay una casa en ruinas*" (Vivanco, 2001-06-26).



**Fig. 281** The Novíssim in deconstruction phase, removing the last floors and using Subirach's plaques to rehabilitate the Fossar (Sierra, 2001-06-08. LVG)



**Fig. 282** Neighbors of the square with the banners behind (Vivanco, 2001-06-26. LVG)

One of the sources that served to finance the rehabilitation works in 2001 was the auction of the reliefs of Josep Maria Subirachs that previously covered the last four floors of the City Hall's Novíssim Building in Plaça Sant Miquel. The last floors, built in 1969, were being disassembled and demolished, first, to reverse the urban mistakes during Porcioles's mandate –as was the case with several buildings in the city that were corrected, after Porcioles, as part of the PGM and the new ordinances– and second, to return to the 1958 original project of architects Enric Giralt i Ortet and Llorenç García-Barbón that was limited to ten floors minus a ground floor which was more in harmony with the square (Sierra, 2001-06-08).

The square's facades nowadays look restored and reformed with a better access to their entrances despite the fact that some need retouches and repainting. Apart from the Memorial 1714 museum, a few ground floors were converted to commerce.

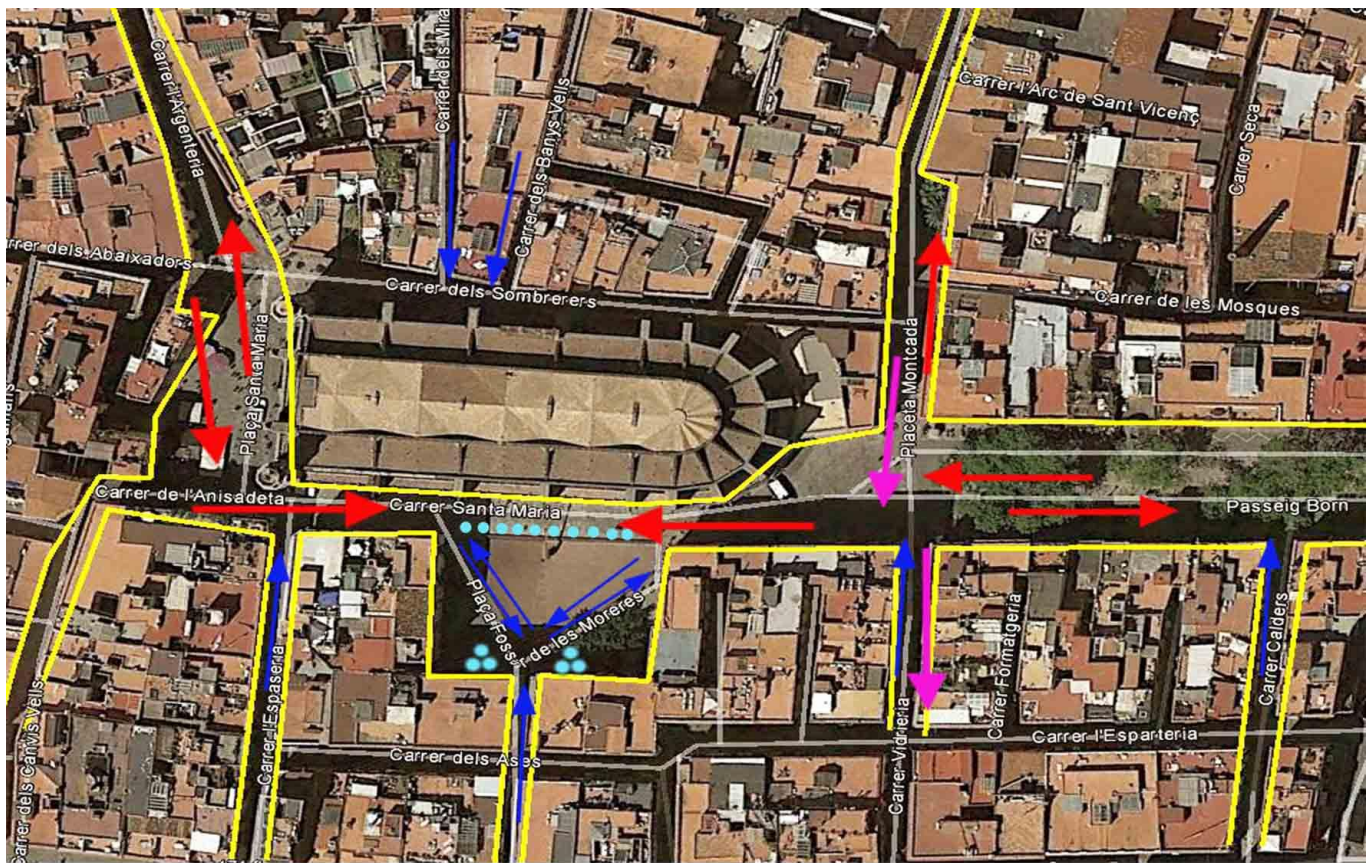




Fig. 283 Views of the state of façades surrounding the square with the building with esgrafiados (Author, 2017)







#### Circulation

- High & main pedestrian circulation towards the square and in and out of the area
- Low pedestrian circulation towards and inside the square
- Medium & secondary pedestrian circulation towards the square and out of the area
- Terrace / place to stay in the square

However, the façades of the Fossar used to be passive façades with small activities except for the Memorial 1714 museum and the window front of the store on the Carrer Santa Maria. With the increase in tourism, one shop and two restaurants were opened in the square with one or two tables outside providing more life to the space.

The streets in Born and around the square are pedestrian streets allowing exclusive access to service trucks. And the main flow of pedestrians towards the square or out of the neighborhood is concentrated along Passeig del Born, Carrer l'Argenteria and Carrer Santa Maria. They are also the main and easier paths of going up to Carrer Montcada than from the upper streets from Carrer Princesa. As for the square itself, the circulation and pedestrian flow are limited. It is used by pedestrians crossing to Carrer Malcuinat, taking pictures, or heading for the shops and restaurants in the square. Moreover, the space itself with its convex surface, on purpose, does not make it a comfortable place to spend a long period of time. The places of stay are mainly concentrated on the red wall that is used as a long bench by tourists and residents alike, taking pictures, resting, or eating, and on the terraces of the square's restaurants.





#### Diversity

- Commerce (shops/ restaurants)
- Buildings of Interest (Museums, Religious, Markets etc.)
- Hotels
- Terraces
- Schools (Academic/ other)
- Offices
- Residential Buildings (blocks of 4-5 storeys)

This section of the neighborhood, which covers approximately 250 meters distance from the square, shows an extremely dense and diverse neighborhood with a combination of hotels, residential and office buildings like the 'Institut Nacional d'Estadística', and high commerce ranging between shops and restaurants. Interestingly enough, despite Barcelona's boom in tourism and the gentrification it is causing, the neighborhood is still quite residential more than its neighbor the Gothic Quarter. Apart from the church of Santa Maria del Mar, the area historically acquires a large number of buildings of interest like the Mercat del Born which functions as a museum and cultural center, the 'Reial Academia Catalana de Belles Arts', and the most emblematic buildings in Carrer Montcada like Museu Picasso, Palau Dalmau, Museu Cultures del Món, Fundació Gaspar, and Museu Europeu d'Art Modern. The neighborhood also has a series of galleries, art studios, schools and training centers like Escuela de Hospitalería Hofman right on the corner of Santa Maria del Mar, the Escuela de Buceo Profesional in Pla del Palau, and 'Eicascantic Espai d'Inclusió y Formació Casc Antic' on Carrer del Comerç. Complementing the Fossar is a series of squares that provide the area with more small open spaces and terraces for tourists like Plaça Santa Maria, Plaça Jacint Reventós, Plaça Victor Balaguer, Plaça de les Olles remodeled shortly after Fossar de les Moreres was created, and Plaça Jaume Sabartés remodeled in 2003.





Fig. 284 Flash mob in the Fossar of 'Fang i Setge' performed in 2015 (Riba, 2015-11-3. Teatrebarcelona)

Unlike Plaça Santa Maria right next to the square, the Fossar de les Moreres seems secluded from the diverse intense activities in its surroundings and this is due to the atmosphere of the space itself being a commemorative and holy place. This means that its concept and purpose as a memorial is successful and well respected. For this reason, the only time of the year that the square really participates in its surroundings is mainly on the day of the Diada. However, it has been part of a few performances in the form of a flash mob of actors coming all the way from Olesa de Montserrat to promote their musical, 'Fang i Setge' (Mud and Seige), based on the events of 1714 and scheduled to be performed in Teatre Victòria in Barcelona.

And in February 2017 during the Fiesta de Santa Eulàlia and the Llum Bcn, an installation in the square was carried out by Miquel Planas and Nuria Guell from the Universitat de Barcelona with the coordination of the Fine Arts students under the name of 'Foc de llar' (Home fire). It was a temporary structure around Viaplana's flame consisting of shopping



trolleys with bricks inside to be lit with fire at night. The whole arrangement intended to represent the warmth of a fireplace as a symbol of family and *“los núcleos familiares establecidos en un espacio físico han dejado de existir”*. However, the installation caused a huge controversy and was strongly criticized by citizens, politicians, and on the social media questioning Mayor Ada Colau and claiming that it was disrespectful for the memory and identity of the space. The representative of the CiU, Joaquim Forn said that the installation is *“muy desafortunada”* and the Fossar is *“un memorial de nuestra historia que honra a los caídos en Barcelona en 1714 que merece respeto y consideración”* and that it is not *“un espacio más de la ciudad”*. Ricard Vinyes responsible of the City Council’s Memoria demanded that the City Council should take responsibility for this error. In the end the City Council had to remove the installation and cancel the nighttime fire (La Vanguardia, 2017-02-11).



**Fig. 285** The installation of ‘Foc de llar’ around the flame in the Fossar (La Vanguardia, 2017-2-11)

## Plaça de la Mercè

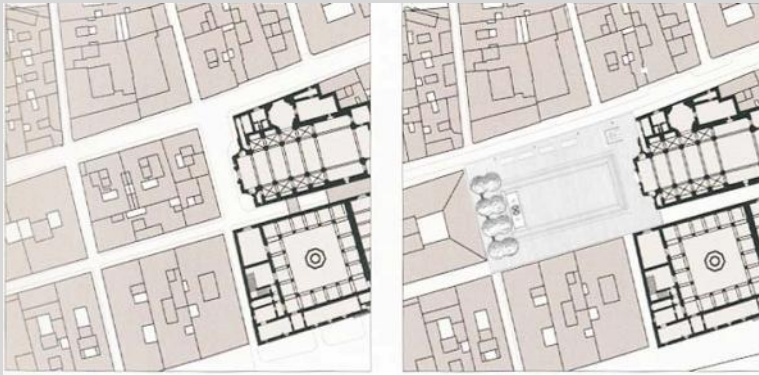


Fig. 286 Author's elaboration on Cabrera i Massanes, 2007

From the series of squares created under the same policy and procedures, is Plaça de la Mercè formerly known to be part of convent de la Mercè before being confiscated by first, the Trienni Liberal in 1823 and second, in 1846 when it was converted into the 'Capitania General'. The

place where the square is located was the convent's orchard and after being confiscated the plot was overtaken by a building block standing in front of the Mercè Church. The square is located between Carrer Ample, Carrer de Louis Braille and Carrer d'En Boltres. It was also one of the first squares to be planned by Bohigas since 1981 where the first step in creating the square was by demolishing the building block. As a matter of fact, there was always an intention to create a square in front of La Mercè church as Porcioles declared in an interview with Frederico Gallo in 'Solidaridad Nacional' in 1970. But due to problems with the residents concerning the building in the plot it was put on hold.

Therefore, after finally demolishing the building, it remained for a while as a small residual space resulting from a reformation project of displacing the church's façade.

The demolition of the block revealed a set of buildings with such character that they appear to have been always designed to face the square. Their façades were cleaned and restored, "*Gràcies a esto, las casas [...] pueden verse hoy tal como las dibujaron sus arquitectos y forman una plaza estilísticamente controlada*" (Bohigas, 1985: 88).

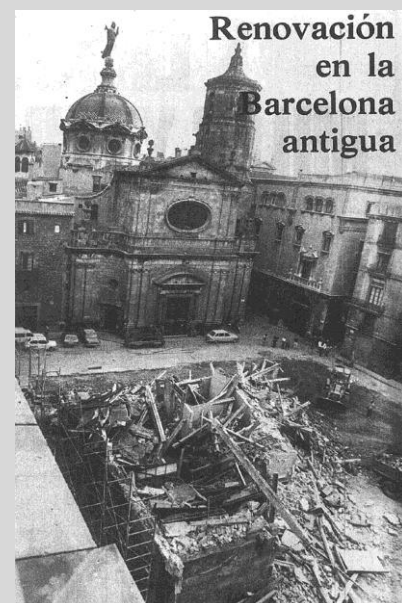


Fig. 287 The square before / after demolition of bldg (Unknow, 1979-1981. AFB) (Pérez de Rozas, 1881. AFB)

The architects Ramón Sanabria, Pere Casajoana, Rosa María Clotet designed a square with proportions that created a unique space dominated by the church's curved baroque façade and the 'Cámara Oficial de la Industria' neo-baroque offices, that gave the space a baroque atmosphere, *"ha nacido una nueva plaza barroco-neoclásica: la plaza de la Mercè..."* (Bohigas, 1985: 88).

The square was designed in the same baroque spirit that it seems that it has always existed. Its pavement, according to Bohigas (1983), is a reminder of Florensa's work in Plaça Sant Jaume or Plaça del Rei and the whole composition rests on a longitudinal axis. It is paved with 60x30cm slabs of slate interrupted by two concentric rectangles of 90x30cm and 90x20cm white travertine starting near the church and ending at the feet of the fountain, leaving the center of the square empty of urban elements.

Opposite the church an 18<sup>th</sup> century stone statue of 'Neptune' by Adrià Ferran (Fabre, Huertas, 2004. Art públic) is placed in the center of a small ornamental pond that had a long journey before being placed in the square. Around the pond a grove of holm oak trees and benches are placed.



Fig. 288 A photomontage of the square with the new design (Cunill, 1981. Bcnroc)

The general composition of the square generates a problem in the axis between the church and the Medinaceli palace facing it, therefore, blue back to back 'Romàntico' model benches were added in the square along Carrer Ample's side along with a flag base placed next to the church attempting to reduce the space's geometry and to balance and reinforce the church's axis and eccentricity over the square (Boghias, 1985).





Fig. 289 New design of the square with the blue benches and the flag pedestal (2003. Bcnroc) (Author, 2011)

Plaça de la Mercè was inaugurated in 1983 and since then it plays a very important social role particularly during the Mercè Festival that celebrates the church in its perimeter. In the words of Bohigas: *“La nueva plaza de la Mercè [...] donde el esponjamiento físico ha producido un foco social y una reconsideración de la estructura del barrio”* (Bohigas, 1985:42), and *“[...] ha constituït una millora considerable en la trama urbana”* (Bohigas, 1983: 62).

Some years later few modifications were made to the square like adding to the sculpture four small sphinxes that emits water from the fountain, the work of the sculptor Celdoni Guixó. And in 2009 the flag base has been replaced by a terrace belonging to an adjacent restaurant, and the benches in the square and around the sculpture no longer exist. Along Ample street, cast metal lamp posts and a bicycle parking have been placed leaving the drains aligned on the opposite side (Bohigas, 1983).





Fig. 290 The square nowadays (Author, 2011)



## Plaça George Orwell



Fig. 291 Author's elaboration on Cabrera i Massanes, 2007

Another square created as a result of esponjamiento is Plaça George Orwell inaugurated in 1991, the work of Josep Barjuan and Joan Miras.

The square emerged after demolishing a block of buildings between Carrer dels Escudellers and Carrer d'En Arai. The emptying

operation is a similar action to that of Plaça de la Merce and has provided a necessary public space for the area aimed to promote residential and commercial revitalization as Barjuan pointed out: *"precisamente en uno de los pocos ejes que lo atraviesan de este a oeste, tal como ya lo contemplaba el PGM, operación destinada al fomento de la revitalización del tejido residencial y comercial del entorno"* (Cáceres, Ferrer, 1993: 100).

Plaça George Orwell has a peculiar morphology of a triangular form enclosed by old buildings.

In many cases in the old town, the consolidation of constructions along certain streets resulted in a specific building alignments that generated at the intersections of those streets triangular forms like for example the confluence of Carrer del Carme and Carrer de l'Hospital that create Plaça del Pedró (Cáceres, Ferrer, 1993).



Fig. 292 Placa Geogre Orwell nowadays (Author, 2011)



The square and streets around it are pedestrian streets leaving the space free for circulation and terraces allowing entrance only to service trucks. It is defined by a triangular area paved with granite also cut in a triangular shape, and its perimeter is paved with 60x40cm sandstone slabs.

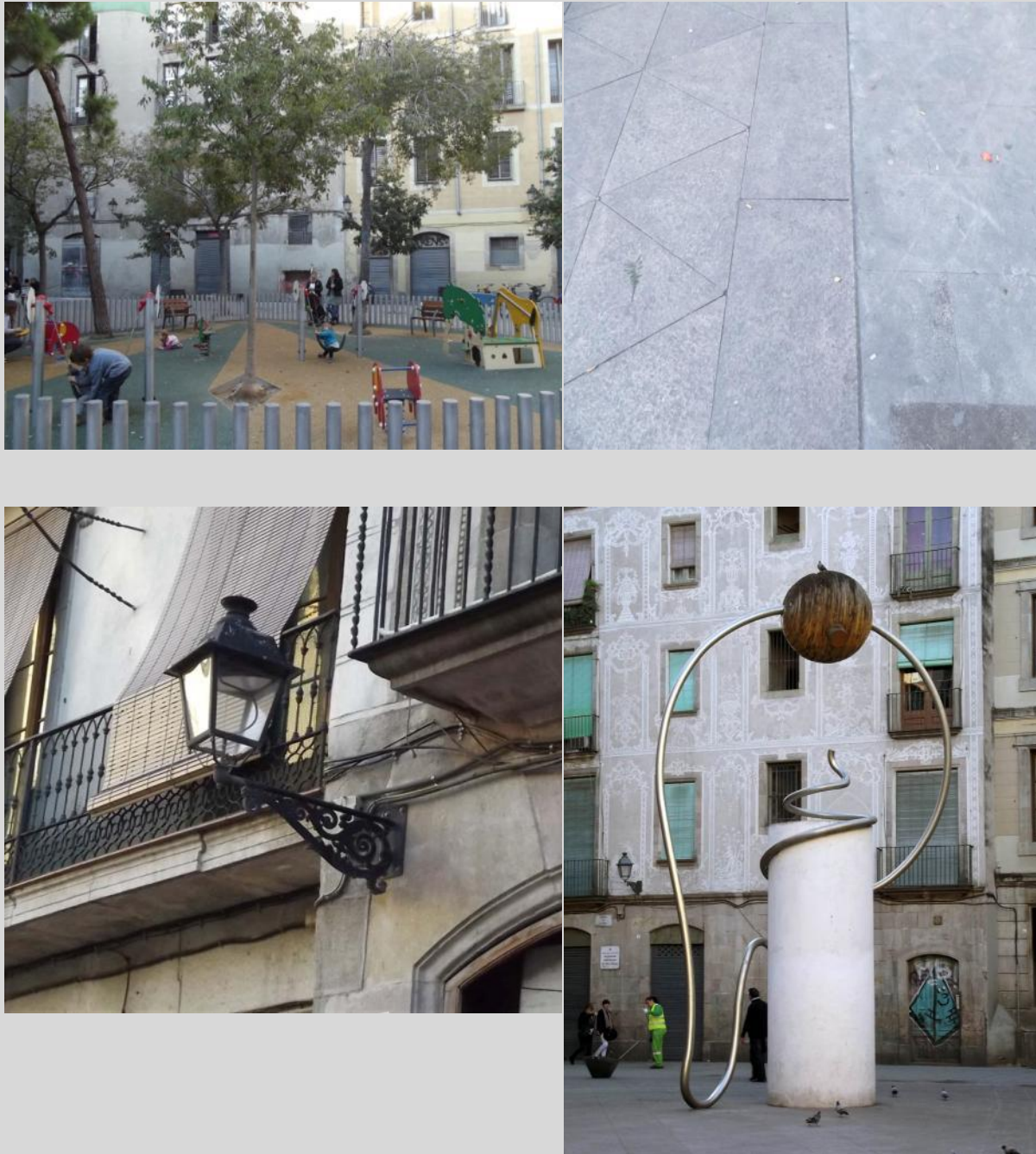
In the corner where Carrer Escudellers and Carrer Arai meet a surrealist sculpture known as 'Monument', the work of Leandre Cristòfol, was placed one year later in 1992. Originally it is known as 'Monument' and popularly as 'La Oliva' or 'El Tripi' a name also given to the square itself (Fabre, Huertas, 2004. Artpúblic).

The sculpture is the large-scale version of an original (made in wood) that measured approximately 80cm and was exhibited at the 'Cercle Mercantil de Lleida' along with other works of the same sculptor belonging to the period of 1930-1935. The square's large version is made of stainless steel, reinforced concrete and wood and expresses one of the persistent themes of surrealism; sex and the female principle (Miralles, 2004. Artpúblic).

The space is free from benches and seating except for the playground, and trees are orderly located inside and around the playground of pine, celtis and oak trees with triangular, circular, and parallelogram-shaped protectors. The square is lit by brackets – the same model as in Fossar de les Moreres– mounted on the buildings' façades, as well as three lamp post projectors spread on the triangular space. The sculpture is also lit by projectors located on the floor.

Terraces from the neighboring bars and restaurants are scattered around the square. It is a peculiarly enclosed space surrounded with buildings some with 'esgrafiados' and others with moldings and reliefs. Despite their restoration some are still found nowadays in a degraded state. However, the square had passed through few modifications before taking this final shape which will be discussed further on.





**Fig. 293** One of the façades and different elements in the square (Author, 2011, 2016)



## Plaça d'Emili Vendrell

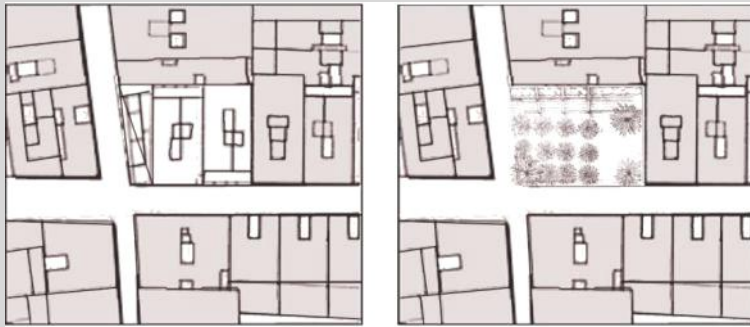


Fig. 294 Author's elaboration over ICGC map

The square is located at the corner of Carrer Joaquim Costa and Carrer Peu de la Creu as a result of demolishing two residential buildings. Carrer Joaquim Costa gives the neighborhood a clear and determined alignment, direction, and continuity,

and the new open space seems as if a piece of the rectilinear street was extracted and the alignment disrupted leaving two party walls exposed. One of them is a building façade painted red with embedded windows and a restaurant on the first floor that opens up to the square with a few terraces. The other building remains a party wall vandalized with graffiti below which rests a fountain monument with a relief dedicated to the singer Emili Vendrell.

The square was created by architects Ramon Sanabria, Beth Galí and Rosa Maria Clotet, and its inauguration took place in 1982. The space is longitudinally oriented, of a two steps higher than the street level, and paved with 60x40cm sandstone slabs. In the middle of the space a large rectangular planter is formed filled with sand and planted with ten acacia trees and one palm tree. A frame is created around the rectangle paved with 40x20cm black slate slabs.



Fig. 295 View of Plaça Emili Vendrell (Author, 2017)

After the space was emptied in 1980, the neighborhood association requested to finance a monument to Emili Vendrell, who was brought up in the neighborhood, and to name the square after him. They produced 1,500 signatures for the request to which the City Council approved:

*“Este reducido espacio ha sido dedicado al célebre cantante catalán a petición de los propios vecinos del barrio. Se encargó un monumento al escultor Solanich que los residentes de la zona pagaron por suscripción popular, si bien el Ayuntamiento adelantó el dinero necesario. La obra ha costado 10 millones de pesetas” (LVG, 1982-05-07: 23).*

The monument was designed by Sanabria, Galí and Clotet and consists of a horizontal stone base of 45cm high that seems protruding from the party wall and runs along the width of the square configuring and defining its limits. It acts as both a fountain and bench where in the middle, protruding from the water, is a vertical slab of approximately 120cm high made of concrete and topped by copper plates. On this slab rests the bronze relief, ‘Balaguera’, designed by Rafael Solanich, and dedicated to the singer with an inscription underneath:

*“A Emili Vendrell, músic cantaire del poble que expressà amb la seva veu inoblidable l’esperit de la cançó, 1893-1962” (Fabre, Huertas, 2004. Artpúblic).*

The relief, inscriptions, and water make from the small square a symbolic space created upon the request of the neighbors, and as Bohigas added: *“El ruido constante del agua nos devuelve la intimidad perdida y el recuerdo de lugares entrañables y olvidados” (Bohigas, 1983: 122).*

However, when the square was first created it was based on a totally different concept and had to be completely remodeled, which will be discussed further on.



**Fig. 296** The memorial to Emili Vendrell nowadays and fountain that acts as a bench (Author, 2017)



## Revisiting Plaça Berenguer el Gran

It is common for old or historic spaces to be renewed or remodeled in order to be brought up to date to new norms of construction and current life needs. We shed the light on one of Florensa's case examples Plaça Berenguer el Gran. In 2015, the square was totally remodeled by architect Jordi Henrich for the same reasons as Florensa (1950) once mentioned: of being enclosed and an obstacle when crossing Carrer Tapineria on foot. Moreover, it had to adapt to the needs and requirements of the city and its large touristic and economic activities taking place around and along the plaza. With the increase in traffic and tourism, the space had been facing for a few years problems in circulation and obstacles concerning its structure particularly because its side along Via Laietana had become a spot for tourist buses. Therefore, in 2015 the City Council decided to totally remodel the square and renovate the whole surroundings. It was subjected to a kind of cleansing, complying with a better accessibility and practical designs homogenous with the other public spaces of nowadays.



**Fig. 297** Above the square with its original garden design and below during reconstruction (Author, 2011, 2015)



**Fig. 298** Plaça Berenguer el Gran nowadays with Jordi Henrich's new design and the enclosed garden eliminated (Author, 2017)



## Change in Design Criteria

As in any active city, public spaces are in constant improvements and update. While some are modified with slight remodeling and renovations, others, depending on certain circumstances, face a complete change and reconstruction.

In this part the case examples do not correspond to the already existing squares that were renovated in the 1980s and 1990s but the ones created in those decades under the same criteria of 'esponjar' and 'monumentalizar' but to soon be radically remodeled due to several issues in their design that affected the space in terms of accessibility, security, social use and vandalism.

The old design of the squares had to be wiped out and replaced by new and practical designs and materials used nowadays in the city.

### Plaça Can Robacols

District Sant Martí

Pedro Barragán, Bernardo de Sola

1987, remodeled in 2006

821m<sup>2</sup>



Can Robacols is a square in the neighborhood of Clot - Camp de l'Arpa in the District of Sant Martí. It was created in 1987 by Pedro Barragán and Bernardo de Sola as part of Bohigas's 'monumentalizar la periferia' that replaced a series of existing constructions.

The territory of Sant Martí extends from Ciutat Vella to Besòs river and from the sea to the limits of Hospital Sant Pau. Clot is one of the district's oldest neighborhoods where the first cluster of houses existed since the

medieval times. It was also known as *Clotum de Melis* (Clot de Mel) for its wide fields, orchards, and cultivation of beehives and honey that supplied food to the city. For this reason, the square-garden created in 1998 replacing an old factory on Carrer Lope de Vega and Carrer d'Andrade has the name Jardins del Clot de la Mel.

By 1850 a small town of housings, hostels, and shops had been formed along Clot's main street. New streets were opened to facilitate communication with its surroundings like that of Camp de l'Arpa known back then as the Muntanya neighborhood.

In Camp de l'Arpa, the first urbanization dates back to around 1845. It was also known for its fields and agriculture controlled by farm or rural houses the likes of Torre del Fang, Torre de Sant Joan, and Can Miralletes that still exist nowadays, or like Torre Sellés and Can Robacols that had disappeared.

Gradually, the fields started to be replaced by sets of rustic whitewashed houses of one or two storeys (ground floor+ 1 floor), known as 'casas bajas', with sloped decks and small gardens at their entrances (Dominguéz, 1990-04-10). With the arrival of the train in 1854, Clot and Camp de l'Arpa were divided by the train tracks where now Avinguda Meridiana passes. This led to fragmentation and a loss of global identity. With Cerdà's Plan approved in 1859 and the district's aggregation to Barcelona in 1874, more plots of land were lost to construction of 3 storeys buildings with 'esgrafiados' and reliefs on their façades. However, the area resisted Cerdà's Eixample, and strong oppositions from land owners and consistory members caused some of the ensanche's rectilinear streets to be broken before crossing the neighborhood, such as, Carrer Còrsega, Carrer Roselló and Carrer Provença that die when reaching Carrer Rogent. Some passages from the 19<sup>th</sup> century urban fabric are still maintained like Carrer del Sospir, Carrer del Trinxant, Carrer del Pistó, and Carrer del Clot among others.

Both neighborhoods became a hub for industries –like their neighbor Poble Nou– where the first factories installed were flour windmills followed by textile industries, tanneries, tiles, and chemical products among others. The land was ideal for factories due to the water of the 'Rec Comtal' that fed the fields, factories, and houses starting from the Besòs and passing through Carrer Bofarull and Plaça Doctor Serrat down to Plaça de les Glories reaching the walls of Ciutat Vella<sup>128</sup> (Piqué, 1984-10-19).

In the 1920s, Clot and Camp de l'Arpa witnessed large waves of immigrants, mainly workers that settled and worked in their factories or in Poble Nou's "La Catalana" which was the main link and bond between the three neighborhoods (despite them being separated by the Gran Via, Diagonal, and Plaça de les Glories). With time they became consolidated industrial and labor settlements with a large increase in population.

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<sup>128</sup> The water from the 'Rec Comtal' was cut in the 1940-1950 when Clot's fields were no longer irrigated



Fig. 299 Camp de l'Arpa and Clot in a section from Cerdà's Plan of 1855 (the same one used in the 2<sup>nd</sup> chapter)  
On the right the neighborhoods in 1920 (Cerdà, 1855) (1920. ICGC)

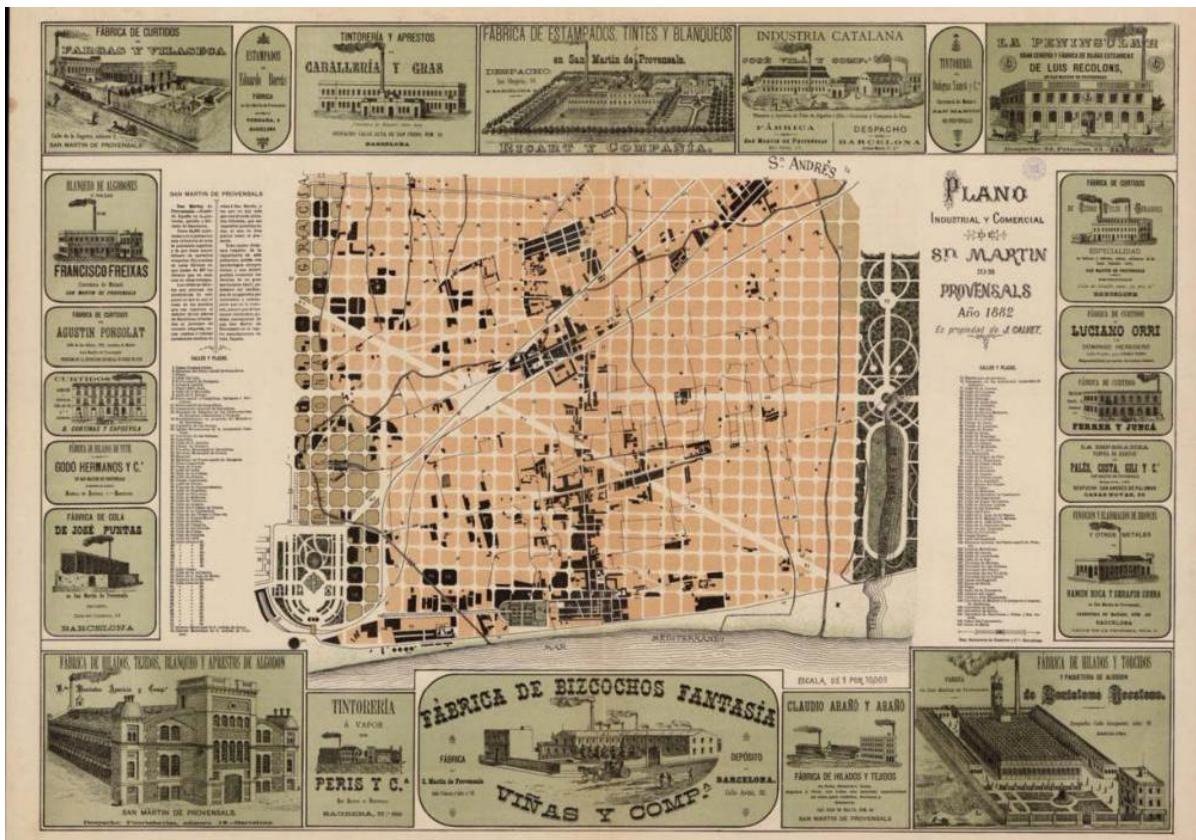


Fig. 300 Plan showing the quantity of factories in and around Sant Martí del Provençals. In the plan the Rec Comtal can be also seen passing diagonally reaching the Ribera neighborhood (Calvet i Boix, 1882. ICGC)



In the post-war era of the 40s and 50s, waves of immigrants continued to flow and with time the neighborhoods became consolidated industrial and labor settlements with a large increase in population.

During the peak of Barcelona's growth and developments in the Porcioles era, the shortage in housing caused a change in land classifications and the neighborhoods grew with new high rise buildings of 5 to 7 storeys coexisting or replacing the low houses. The existing factories closed or moved to different areas leaving their place open for speculation and more buildings were built some of which reached 12 storeys along Avinguda Meridiana.

One of these factories is Can Rius once located in the corner of Carrer Mallorca and Rogent. As a matter of fact, the last resistance to the Eixample's rectilinear streets was Carrer Núria. It consisted of a narrow strip of street with low houses extending between Carrer Rogent and Carrer Puigmadrona. But in the 1960s and for traffic reasons the houses were demolished and aligned, and the street was widened allowing Carrer Mallorca to cross through until Avinguda Meridiana.



**Fig. 301** On left Carrer Rogent with the tramway (Petit, 1969. AMDSM) and on right Carrer de Nuria with the low houses (Unkown. c1950. AMDSM)

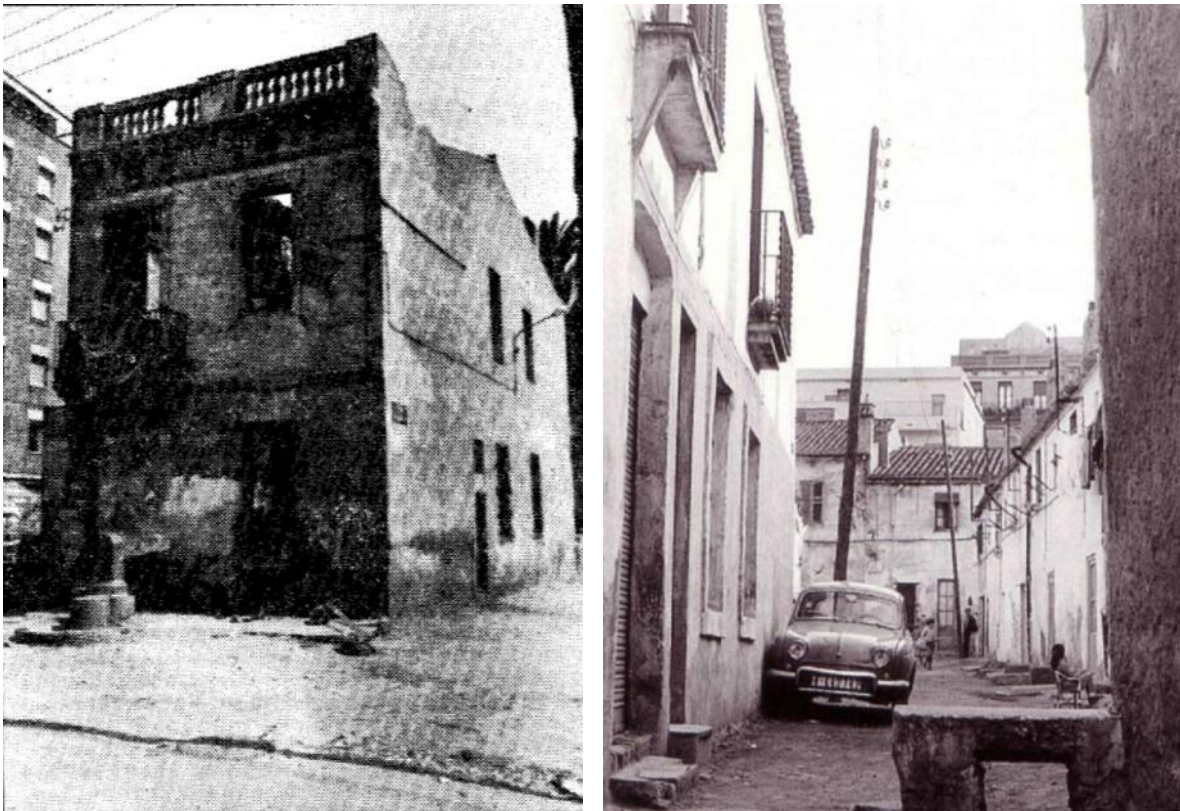
The densification, deficiencies, and the scarcity of green areas led the Clot-Camp de l'Arpa's neighborhood association, founded in 1975, to demand the improvement of the neighborhood's quality of life, and to request that some of the plots be converted into open public spaces. With the success of their struggle, the neighbors reclaimed open spaces including that of Can Robacols, Plaça Canonge Rodó, and the Renfe's old terrain that is nowadays Parc del Clot.

*"El Clot sufre deficiencias notables de infraestructura y acondicionamiento urbano. Can Robacols, el núcleo más antiguo del Camp de l'Arpa, e uno más entre 52 "puntos negros" que la Asociación de Vecinos destaca en sus informes. El estudio de la nueva distribución del área de Barcelona ha provocado la ausencia de inversiones en los barrios más antiguos y el Clot que se ha quedado compuesto y sin reparar" (Piqué, 1984-10-19: 21).*



Formerly the space, where now Plaça Can Robacols is located, had been a rural setting with a group of whitewashed low houses, 'casas bajas', located between Carrer de Besalú, Carrer de Josepa Massanés, Carrer del Ripollès and Carrer del Pistó. They were owned by one of the most important families in Sant Martí, Cases family, who had further properties in the neighborhood and held the nickname after which the square was named (Romaní, 2006-12).

However, these small constructions were in a bad condition and a state of deterioration. The plot was classified by the Plan Comarcal as a residential zone. Therefore, in 1978, the houses were expected to be demolished and replaced by a series of 68 buildings of 4 storeys. However, with the opposition of the neighborhood association, the plot was reclassified as a green zone making way for the square (Fabre, Huertas, 2004. Artpúblic).



**Fig. 302** The state of degradation of the low houses (Piqué, 1984-10-19. LVG) (Unknown. c1950. AMDSM)



**Fig. 303** The low houses in the plot where now the square is located (Unknown, c1950. AMDSM)

When comparing the maps below, the map from the mid 1950s shows a quite dense area with the exception of Can Miralletes –the last of the remaining fields–, Plaça de Sant Josep Calassanç, and Plaça del Doctor Serrat still under construction before being inaugurated in 1960. Among the group of houses in Can Robacols’s plot crossed a series of small dead end passages (in magenta) that gave access to the houses.

These passages were removed with the opening of Plaça Can Robacols, as shown in the present day map, which somehow relieved the congested surroundings and, nowadays complements the surrounding squares.

Some of the ‘casas bajas’ (in red) can still be found around the square on Carrer de Josepa Massanés and Carrer de l’Historiador Maïans, and a whole set on Passatge de Catalunya and Roura that lead up to what is left of Can Miralletes<sup>129</sup>.

The plan also demonstrates the creation of two new squares, that of Plaça Carme Monturiol and Plaça Camp de l’Arpa. Moreover, it shows small changes in Plaça de Sant Josep Calassanç and Plaça del Doctor Serrat after being remodeled, the first in 1991 and the latter in 1989.

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<sup>129</sup> The masia of Can Miralletes was conserved and functions nowadays as a restaurant. While of the block belongs to a school, the rest of the block was converted into a garden, a reminder of what is left of Camp de l’Arpa’s agriculture





(Author's elaboration. Maps source ICGC)

During the democratic era in 1982, the City Council decided to demolish the small houses leaving the plot empty awaiting the plans for the new square. By 1985, apart from Plaça Can Robacols, several projects were being prepared by the City Council that included Plaça d'Àngel Pestaña and Plaça Francesc Layret in Nou Barris, and the park of Trinitat Nova. Given the high degree of labor these projects required, they were subsidized with

funds from the 'Acuerdo Económico y Social' (AES) that was responsible for 30% of the budget (Castro, 1985-06-23).

Architects Bernardo de Sola and Pedro Barragán designed the square that was finally inaugurated in 1987 with the presence of Mayor Pasqual Maragall.

The architects took advantage of the natural topographic slope of the land and designed in its center an elliptical oval space. The oval is leveled with the square's lower part on Carrer del Ripollès, and on the square's higher part on Carrer de Besalú it gradually rises following the slope and forming a concrete wall of approximately 2 meters on its highest end.

In the middle of the oval, separated pathways mirror the oval wall and on its sandy floor stand two preexisting palm trees each in a circular cement planter, one of 3 meters high and the other of 2 meters.

The upper level is planted with tipuana trees and filled with benches placed strategically in the square. To protect the upper area from the difference in level, a blue cylindrical balustrade is placed around the oval wall.

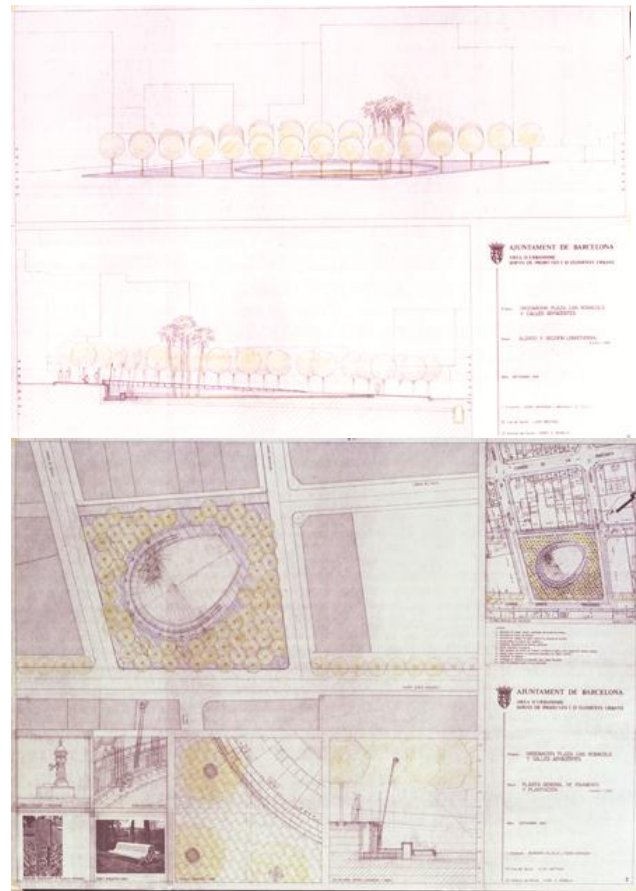
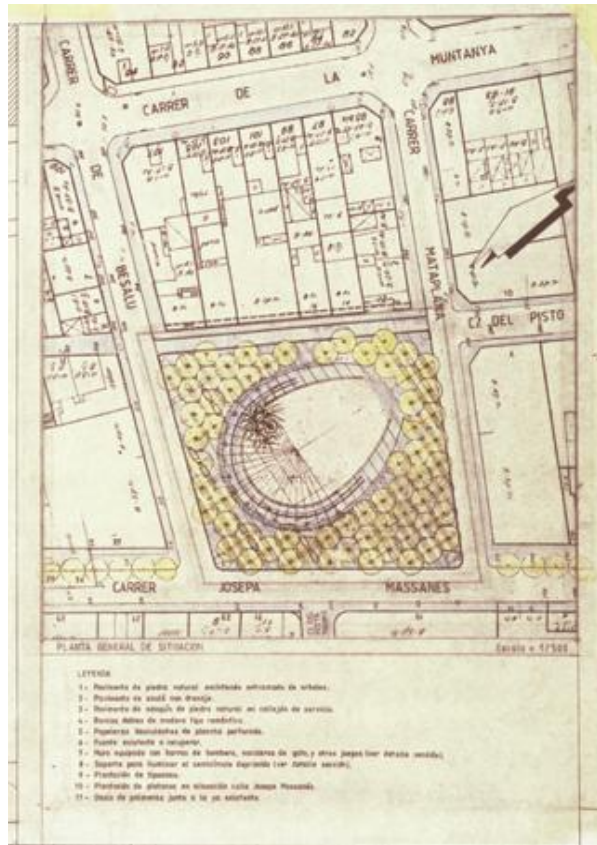
The two levels are visually and physically connected by two three-dimensional hollowed sculptures forming a kind of a playful slide between the two levels inviting pedestrians to the lower level.

In addition, large metallic sculpture-like structures are combined together between the two levels communicating in a colored dynamic of blue, red, and yellow reminding us of the "agit-pop" (Guerra, 2004. Artpúblic).

Apart from being sculptures they function as street lights and as playground elements: the red structure has projectors on top that provide light to the square; the yellow structure acts like a ladder; and the blue one looks like a bridge or even a swimming pool trampoline reflecting and enhancing the depth of the oval.

Plaça Can Robacols's whole ensemble is an example of the *"the ambiguity, highly characteristic of the Russian avant-garde, between sculpture and a public space"*, and its playground elements of slopes, ladders and slides are integrated in its design. The square's two levels created different views and relations between users staying in the oval and the ones overlooking it in the higher level: *"The people on the lowest sand-covered part of the square can be seen by those on the street above. The shape of this square is similar to that of a box-like theatrical enclosure, and the movements of the people in it provide a spontaneous and observable show"* (Guerra, 2004. Artpúblic).





**Fig. 304** Bernardo de Sola and Pedro Barragán's plans and new design of Can Robacols (Ajuntament de Barcelona, 1986. Bcnroc)





**Fig. 305** Different views of the square with the sculpture slide, colored elements, pavement and different levels with users overlooking the oval space below (Ajuntament de Barcelona, 1987. Bcnroc) (CR Polis, 2002)

However, the space did not remain the same since the modernity of the design was not compatible with its surroundings. *"It is nevertheless true that the arrogance of the modern design clashes with the activities still carried out within it. Can Robacols constitutes a utopian modernity seemingly defied by the heterogeneous nature of the constructions and activities that surround it"* (Guerra, 2004. Artpúblic).

It became a dry and grey place exposed to deterioration, abandonment, and vandalism. The two levels became inconvenient cutting the pedestrian flow and creating a kind of insecurity and an unpleasant experience. The elements of play like the slides and metallic

structures' bridge and ladder were deemed unsafe. They were inappropriately used and the yellow ladder had to be protected by a board to prevent children and adolescents from climbing it or for jumping from the blue bridge into the oval space. Eventually in 2005, the slide's hole was completely closed with cement for further security.



**Fig. 306** The space in 2002 showing the space vandalized with graffiti and deteriorated (CR Polis, 2002)





**Fig. 307** The metallic structures protected with a board for safety reasons that is vandalised. The whole space in a state of deterioration (CR Polis, 2002).

Right picture showing how the elements were used by children (Cunill, 1987. Bcnroc).







**Fig. 308** View of deterioration and vandalism around the slide hole (CR Polis, 2002)



**Fig. 309** The slide in 2002 still opened where as in 2005 it became completely closed for safety reasons (CR Polis, 2002, 2005)

In 2006, through the 'Pla de Millora dels Carrers', the square was inaugurated with the presence of the new Mayor Jordi Hereu.

It was totally remodeled along with Carrer de Finestrat, Carrer Llangostera, and Carrer de l'Historiador Maïans that were renewed and gave pedestrians a high priority. The plan's objectives were to improve the quality of living by creating more sustainable and accessible spaces. The renovation of Can Robacols and its neighboring streets allowed the neighborhood to gain space, improved the pedestrian flow and enhanced its commerce:

*"El Pla de Millora dels Carrers de Barcelona tiene como objetivo mejorar la calidad de vida de los ciudadanos con actuaciones concretas en el entorno habitual de los ciudadanos para obtener una ciudad más limpia, más sostenible y más accesible. Este plan supone la inversión de 11,5 millones de euros en las actuaciones de mejora del distrito de Sant Martí. La renovación de la plaza Can Robacols, junto a las reformas en las calles Historiador Maïans, Llagostera y Finestrat, ha permitido ganar espacio para los peatones e impulsar el comercio de barrio"* (La Vanguardia, 2006-11-19: 7).

Due to the change in design criteria in those years, Plaça Can Robacols took a different shape abiding by the standard norms of design and materials, issues of security, and accessibility:

*"La reurbanización de la plaza Can Robacols, con una superficie total reformada de 1.600 m2, ha supuesto una inversión de 195.080 euros, que ha permitido reordenar la plaza, renovar el alumbrado, instalar juegos infantiles, crear un espacio para jugar a la petanca, sustituir el mobiliario urbano y plantar nuevos árboles"* (La Vanguardia, 2006-11-19: 7).

In the new design, the difference in levels is eliminated and the metallic structures and hollowed sculptures are removed. However, the trace of the oval remains and is filled with red asphalt. Three new playgrounds with standard play elements are incorporated in the oval. The rest of the square's pavement was renewed with rows of 60x40cm and 60x8cm concrete slabs placed diagonally with respect to the corners of the square's irregular rectangle. The space is lit through a single street light with several projectors, and lamp posts located on the sidewalks of Carrer Josepa Massanes outside the perimeter of the square.

The only elements remaining from the old design, apart from the trace of the oval, are the palm trees and their planters. New benches are placed around the square along with tipuana protectors all aligned in the same direction as the pavement. In addition, there are new litter bins, a potable fountain, and bollards on the sides to protect the square from vehicles.





Fig. 310 New design of Plaça Can Robacols (Author, 2011)







Three enclosed areas with children's playgrounds designed by Benito with sand floor.



12 "Neobarcano" Benches designed by Benito 180x71.5cm



Tipuana trees



Stainless steel street lamp outside the square's perimeter 30x400cm



Stainless steel light projector designed by Sometal

Garbage Containers



Parking meter qty2, 80x12cm bollards, and 84x38cm garbage bins qty4 designed by Benito



Fountain 110x30cm designed by Benito



Bike Parking



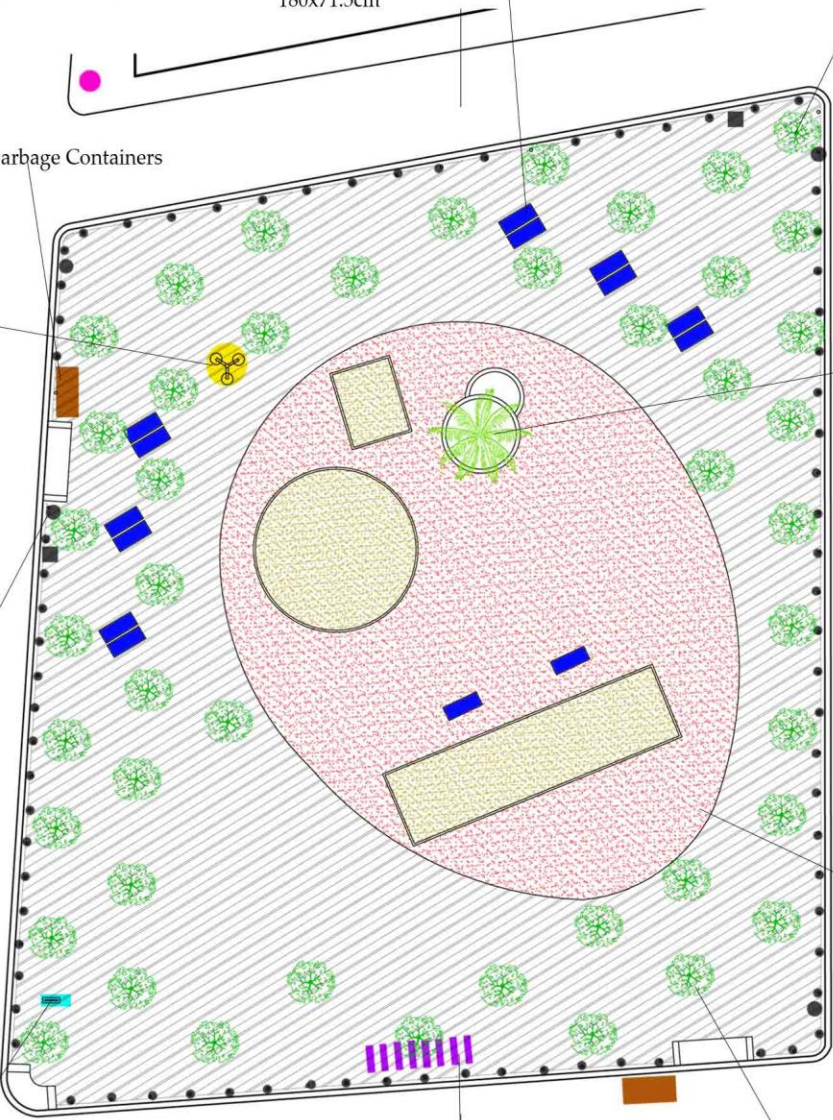
Palm tree with cement planter



Oval paved in red asphalt and outer space with rows of 60x40cm and 60x8cm concrete slabs



Rows of 60x40cm and 60x8cm concrete slabs and 80x80x8cm concrete planters





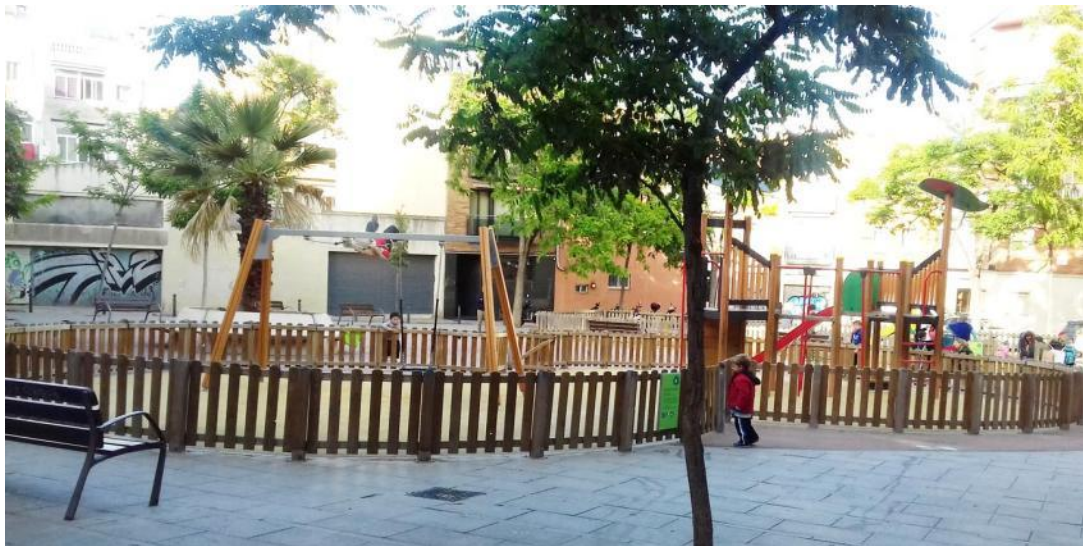
The square nowadays is more compatible with its surroundings than the former design. It is cleaner, safer, simpler, more organized, sustainable and well used by the citizens living in its surroundings. The playgrounds are full of children coming out of the surrounding schools especially during the weekends and afternoons. The benches are used by old people during the day and young people during the night. Unlike the difference in levels of the former design that divided the users, this new flat space created an equal sense of unity and connection between the individuals sitting in the square and passersby.

Within the block, a new square is created, Plaça Carme Monturiol, providing the neighborhood an additional open space (La Vanguardia, 2006-11-19; Romaní, 2006-12).

**Fig. 311** Special plan PERI for the improvement of the Uriach Laboratories block drawn in 1999 (2001. Bcnroc)



- 1- The original palm tree had to be cut down due to a disease and is replaced by a smaller one. The cement planter is also replaced by a white planter with decks incorporated into its sides to provide a seating area.
- 2- Three new street lights were added on the side of Carrer del Ripollès that continue along the whole street until Carrer Muntanya.
- 3- The circular and squared balustrades of the playgrounds are now joined forming one big area of semi-circles and a swing is added.
- 4- The benches are no longer placed back to back on the upper half of the square but scattered all along the area facing the playground which makes the whole square useful and provides for the parents a better view of the playgrounds.



**Fig. 312** The square renewed with new elements: the playground, and tree planter (Author, 2017)





As for the buildings on the perimeter of the square, they are of new construction ranging from ground floor+ 4 to 6 floors, except on Carrer Pistó where an old warehouse can still be found and a building consisting of 2 to 3 floors + ground floor.

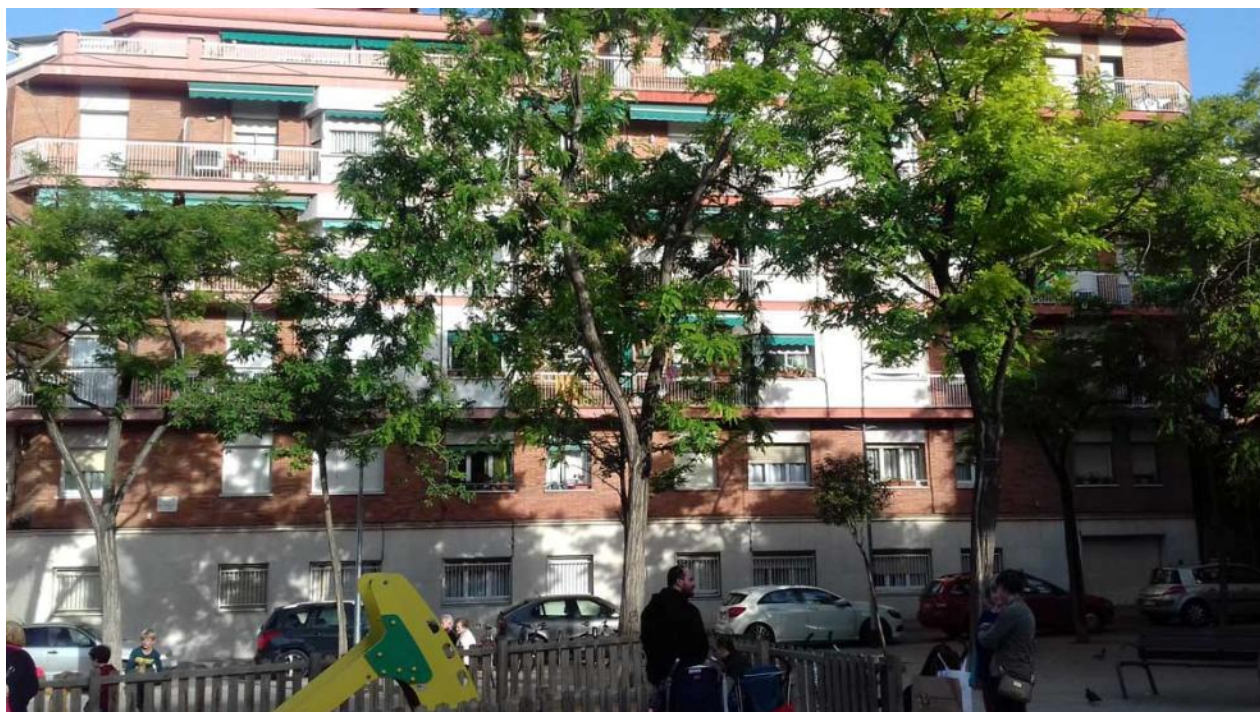
The facades of the buildings are mainly passive with no commercial activities, restaurants, or window shops. On Carrer Josepa Massanes there is a car garage, and on Carrer Besalù there is the closed window of Barcelona pel Medi Ambient office. As for the rest it consists of walls, shutters, closed windows and entrances.



**Fig. 313** Façade on Carrer Besalù and down on Carrer Pistó (Author, 2017)



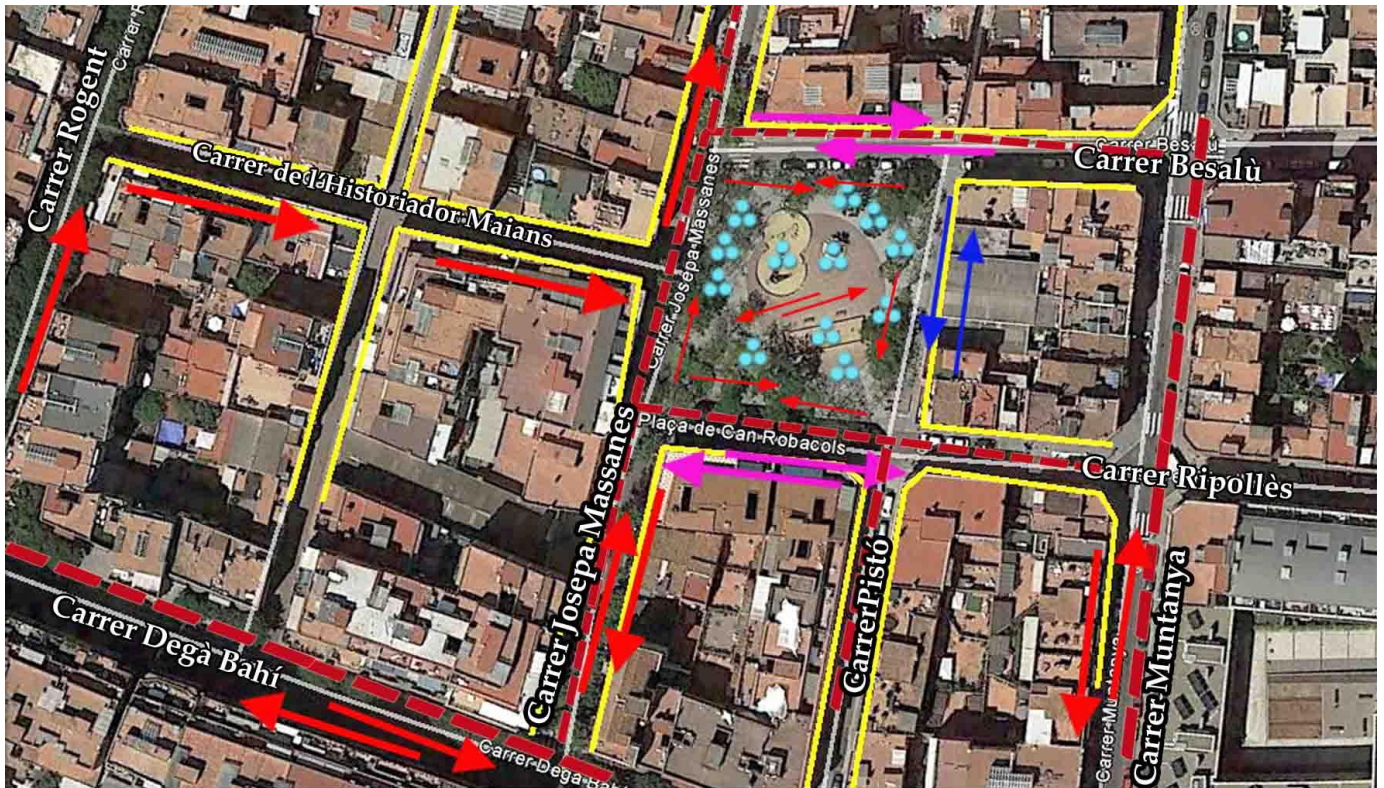




**Fig. 314** Façade on Carrer Ripollès and below on Carrer Josepa Massanes (Author, 2017)







#### Circulation

- High & main pedestrian circulation in and out of the area and inside the square
- Medium & secondary pedestrian circulation towards the square and out of the area
- Low pedestrian circulation towards the square and out of the area
- Terrace / place to stay in the square
- Vehicles circulation

When Plaça Can Robacols was remodeled in 2001, the whole area was rehabilitated and the surrounding streets of Carrer de l'Historiador Maïans and Carrer de Ripollès were converted into pedestrian priority streets and a 'zona 30'. Carrer Josepa Massanes and Carrer Besalú remained exclusive for low impact vehicle circulation that connects with Carrer Muntanya. The main pedestrian flow towards the square is concentrated from the Carrer Rogent crossing through Carrer de l'Historiador Maïans, and from Carrer Josepa Massanes. The rest of streets have a medium flow leaving Carrer del Pistó to be used only by residents living or working on the street. Now despite the pedestrian priority the square remains separated from its perimeter by a vehicle circulation which makes it somehow insecure for unsupervised children to cross. However, this fact does not prevent the square from being extensively used with pedestrians crossing in all directions to either sides of the neighborhood or using the whole space to stay while watching the children in the playgrounds.



**Fig. 315** Street with car priority on Carrer Josepa Massanes (Author, 2017)





### Diversity

- Commerce (shops/ restaurants)
- Buildings of Interest (Museums, Religious, Markets etc.)
- Schools (Academic/ other)
- Offices
- Low Houses (casas bajas)
- Terraces
- Residential Buildings (blocks of 3-5 storeys)

This section of the neighborhood, which covers approximately 120 meters distance from the square, shows a dense residential neighborhood. However, it is quite diverse with a combination of schools, buildings of interest, and offices.

The square's perimeter and vicinity totally lacks commercial activity, but the high concentration of shops and restaurants in the adjacent streets, especially on Carrer Rogent, compensate for this shortage. The buildings of interest near the square consist of the Foment Martinenc on Carrer Rogent, and of the youth center Espai Antoni Miró Peris. It is surrounded by two schools, Institut Juan Manuel Zafra and Escolàpies Sant Martí, where students after leaving school in the afternoon share their playtime between Plaça Can Robacols and Plaça de Sant Josep Calassanc.

The users residing the square are mainly students or parents with their children. The lack of terraces or other form of activities around the square does not keep it from being an important and centric place in the area. It is part of the neighborhood's itinerary and the place from which the Clot-Camp de l'Arpa festivals are inaugurated. All parades begin and emerge from the square before passing to Carrer Rogent through Carrer de



l'Historiador Maians ending all the way down in Parc del Clot. Plaça Can Robacols along with Carrer Rogent are fundamental elements for binding and improving the life of the neighborhood.



**Fig. 316** The celebration of 'Festa de les Diaboles' in the square before going along C. Rogent (Author, 2017)





## Plaça de les Navas

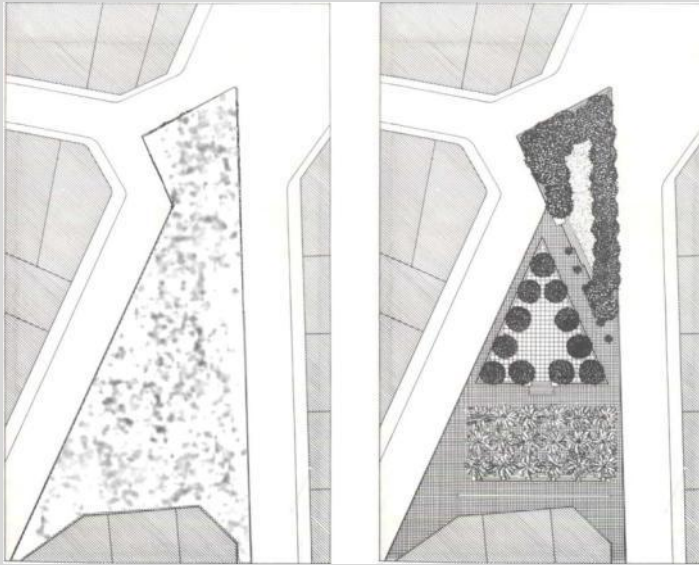


Fig. 317 Author's elaboration on AA.VV.1987

The square is located in Poble Sec neighborhood in the district of Sants-Montjuïc. It is situated at the intersection of Carrer de Teodor Bonaplata, Carrer de Jaume Fabra and Carrer de l'Olivera acquiring a quasi-triangular form. It is one of the spaces in the city that used to be a residual and irregular space without any sort of definition from the surrounding buildings' facades. This empty space has been transformed into a new public square as a result of complaints from residents

concerning the lack of trees in the neighborhood. It was created in 1982 by architects Daniel Navas, Neus Solé, Imma Jansana.

Irregular and detached from the surrounding façades, the architects took advantage of the space's peculiar geometry to create a square divided into two geometrical areas. As stated in *Spaces and Sculptures* (1987):

*"The definition of the space's form has been made by using an accurate interpretation and knowledge of the different geometries involved. Thus, from the observation of alignment and geometry of the streets defining the intersection, there appears a new order which is blended into the immediate surroundings and which confronts the former chaos, using as starting point its own conditioning factors" (AA.VV, 1987: 162).*

The first area is reached through a few steps connecting the sidewalk, from one side, to an esplanade controlled by strict geometrical rows of palm trees planted in protectors that form, along with the concrete pavement, a checkerboard style flooring. On the sides of the esplanade white Romàntico back to back benches are centrally aligned inside the checkerboard floor.

As for the second area, from the esplanade rises a strictly triangular area that is reached by a staircase, enclosed by a small stone wall, crowned with stone balustrades, and traced with benches, lighting and pine trees.

From the esplanade, on Teodor Bonaplata street, a strip of land continues beyond the enclosed area to form a small seating area of pine trees, gravel and cobblestones serving as background for Joan Rebull's 'Maternitat' sculpture. After Rebull's death in 1981, the City Council acquired his sculpture and placed it in the new square. It consists of the

figures of a mother and child created in 1960. Due to acts of vandalism the original marble sculpture was substituted by a bronze copy in 1995 (Fabre, Huerta, 2004. Artpúblic).



**Fig. 318** Top view of the square (AA.VV, 1987: 162), and the esplanade and balustrades (CR Polis, 2006)







**Fig. 319** Small seating area with Rebull's sculpture (CR Polis, 2006)

The triangular area and the balustrades enclosing it are a reminder of the 19<sup>th</sup> century 'salón' similar to Antoni Rovira i Trias's stone balustrades of Saló de Sant Joan (Passeig de Lluís Companys) in 1887, and of Passeig Colom in 1883 between Portal de la Pau and Passeig d'Isabel II, all created for the 1888 International Exposition. The balustrades of the former and the latter were decorated with dragons, urns, and flower bases. Both were aligned with trees, benches and streets lights just like in Plaça de les Navas.



**Fig. 320** Rovira i Tria's Balustrades of Passeig Lluís Companys (Author, 2017)





**Fig. 321** Views of Passeig de Colom with the balustrades. Above view from Pla del Palau towards the monument (Kurz, 1890-1900. AHCB)

However, in 2006 Plaça de les Navas was scheduled to be destroyed to give way for a subterranean parking, as if used an excuse to radically clean the space that had been in degradation for the past decades.

The neighbors in the vicinity of the square had been demanding for some years the improvement of the space. They were left discontented with the design complaining from problems of vandalism, degradation, poor maintenance, and dirt especially in times of rain. Due to the multilevels and the square's separation from its surroundings, the elderly criticized the lack of direct accessibility and the isolation of the seating areas.

Therefore, the City Council decided to take measures by totally remodeling the square. With the consent of the neighbors, it took advantage of the improvements to build a parking that would alleviate the lack of space and provide high pedestrian priority.



Fig. 322 Degradation and acts of vandalism (CR Polis, 2006)

In 2007 the total modification and leveling process of the whole space began, and the creation of the parking underwent on schedule as part of the 'Pla Fent Barcelona'. It consisted of four floors underground that provided around 340 spaces. However, the works lasted for many years and were subjected to budget over-passing and several delays that affected the neighbors and the commerce of the area:

*"El coste de las obras del aparcamiento ha alcanzado los 8,8 millones de euros.*

*Aprovechando la última fase de construcción del parking, que tendrá cuatro plantas, dos destinadas a plazas fijas y dos a rotación, el distrito de Sants-Montjuïc aprobó una partida de 1,6 millones de euros para concluir la urbanización de la plaza. Esta partida no estaba prevista pero, según el concejal Jordi Martí, se decidió concretar para mitigar el lustró de incomodidades que han sufrido los vecinos"* (Placer, 2011-10-26).

In addition to the parking, the works included new sewage, drainage, irrigation, and piping systems.



Fig. 323 Total destruction of the square in 2007 (CR Polis, 2007)





**Fig. 324** In 2011 the parking was still under construction and the surface is being leveled (Author, 2011)

Finally the new design was finished by the end of 2012 and the result was a new square of one clean level with no vehicle access and totally connected to the buildings facilitating pedestrian access to the commercial shops on the ground level. On Carrer Teodor Bonaplata, a large playground is created with a seating zone filled with benches and two bronze sculptures. On Carrer Jaume Fabra, terraces of the adjacent restaurants fill the square. Benches, trees of acacia, planters, street lights, and a fountain fill the perimeter of the square leaving the center of the space empty. In the area where the esplanade used to be, palm trees are geometrically planted echoing the square's old design and underneath, on the side, Joan Rebull's 'Maternitat' is placed on a high stone pedestal.







Fig. 325 Plaça de les Navas nowadays (Author, 2016)







## Plaça dels Porxos

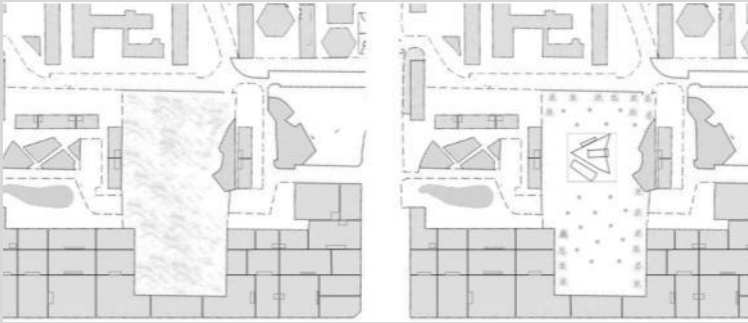


Fig. 326 Author's elaboration on ICGC map

The square is located among a series of high rise buildings between Carrer de Fluvà and Gran Via in Verneda neighborhood of Sant Martí district.

It is an important space for the neighbors that went through a long struggle to

convert this space into a public square.

In 1982 parts of the residual space was scheduled to be constructed with a housing block for the Policia Nacional. However, this matter was opposed by the residents who wanted to convert the space into a neighborhood square. From this point forward a long struggle had started with complaints, protests, and petitions headed by the head of Sant Martí de Provençal's neighborhood association Manuel Martínez Martínez. After seven years of activism, the neighbors won the struggle after the courts decided in their favor.



Fig. 327 The residents protesting against the housing block in the square (Unknown, 1982. AFB)





Fig. 328 The residents participating in tearing down the limit wall of the housing block (Diango, 1982. AFB)

Architects Moisés Gallego and Franc Fernández immediately began in creating a square that was inaugurated in 1994 by Pasqual Maragall. They designed a space with a mixture of benches, green patches and parterres on the perimeter of the square leaving the center empty except for geometrically placed street lights.

But what was significant about the design is the large monumental fountain placed on one half of the square made from reinforced concrete planes intertwined together to form a play of geometry and water: *"Its composition includes factors of architectural design..."* (Dalmau-Gorriz, 2004. Artpúblic).

The square's size was 19.19mx45.8m and 6m high. It is accessed on all side and *"it took the name of porxos (archways) of one of the buildings around it, and which has contributed towards giving the square its character"* (Fabre, Huertas, 2004. Artpúblic).

The concept and the excessive size of the fountain were made for it to be the area's center of attraction, a meeting point, and an interactive place that became favored by skaters:

*"The fountain, an event and a meeting place. Water as a nucleus and place of concentration of energy constitutes a threshold of ideas and a summary of our public culture. This is a contemplative water fountain. With its structure, however, it is a necessary revitaliser of conducts and above all, of journeys. And today, we can add to this a space of actions: the use by skaters as active elements of play"* (Dalmau-Gorriz, 2004. Artpúblic).



**Fig. 329** Different views of the fountain with children playing on top (CR Polis, 2002)





**Fig. 330** The atmosphere of the square with the fountain and scattered street lights (CR Polis, 2002)



**Fig. 331** Skaters taking advantage of the fountain's geometric planes and different levels (CR Polis, 2001)





**Fig. 332** The fountain found in a degradation state and vandalized (CR Polis, 2001)

After a while the neighbors grew discontented with the fountain because it caused various problems and issues. It was vandalized, misused and was left to degrade with very low maintenance. Its size was taking over the square, and the neighbors complained from its dirty surface and unclean water that during summer it became stagnant emitting smells and attracting mosquitoes. Once again the neighbors started a petition to remove the fountain and have a new designed square (Ros, 2002-01-24. Clottv).

Finally in 2007 the fountain was completely removed and the neighbors enjoyed a new square with a clean surface paved with red asphalt separated at certain intervals with strips of 80x40cm stone slabs. During the total remodeling of the square a subterranean parking was added. In the place where the fountain was located a green area with trees is planted with a large playground on the side. To comply with the square's name, two long iron and stainless steel *porxos* or porches of different sizes were added on one side of the square following the lines of the stone slabs. It added value to the place while providing shade as well as interesting perspectives towards the buildings.



Fig. 333 Plaça de les Navas nowadays (Author, 2017)



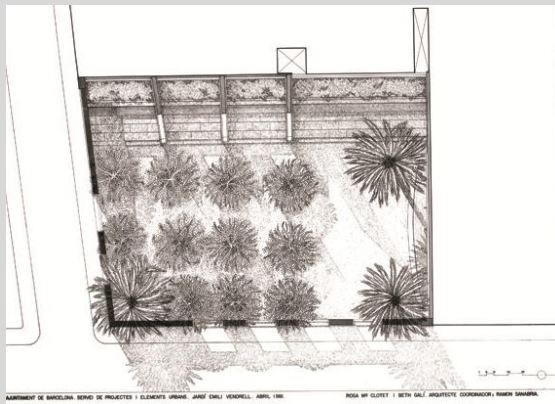






## Plaça Emili Vendrell

As for Plaça Emili Vendrell, when it was first designed by Beth Galí and Rosa Maria Clotet it was not an open space as it is now. The architects designed a space protected by walls with large windows attempting to rebuild the emptiness left by the destruction of the existing buildings and the realignment of Carrer Joaquim Costa. The trees, and monument were protected by these walls that according to Bohigas *"plantea la discreta complicitat entre el mundo cerrado, recogido y tranquilo del interior y el compromiso respetuoso del exterior"* (Bohigas, 1983: 122).



**Fig. 334** The early plans, sections and perspective of the square showing the enclosed space (Cunill, 1981. Bcnroc)

There were three palm trees and twelve acacias that one of them remains after the walls were torn down and white back to back benches Romàntico model. The red building façade, on Carrer Peu de la Creu where the restaurant is currently located, used to be a party wall with low divisions and built-in stone benches before being renovated with open windows and the restaurant's fronts.



**Fig. 335** Views of the wall and the interior space of the square (Molina, 2000. TCV)



**Fig. 336** The square had to be totally enclosed (Molina, 2000. TCV)



However, the neighbors' idea to create a calm, green and tranquil place for the residents was not fulfilled. Shortly after the inauguration day, Plaça Emili Vendrell had to be closed since it faced similar problems to that of Plaça George Orwell. The neighborhood and its entourage were at their high points regarding social problems of delinquencies, violence, crime, and drug addiction. It became a dirty and dangerous corner presided over by a sense of insecurity and frequented by marginalized people who made the small territory their own. And the neighbors were left without a space to enjoy and became mere passersby unwilling to enter the space.

In other words, the enclosed square became a haven, and a safe nest for drug abusers, drug traffickers, vagrants and all kinds of crimes.

The fountain and the water spring were damaged and the accumulated dirt converted the square into a consolidated space of difficult maintenance, wasted and of little use.

This is when the large windows were immediately closed with iron grills and the entrance was gated to be closed during the night.

Permanyer pointed out that the walls were an architectonic intervention to protect the space but:

*“Pese a ello, el resultado fue negativo; no tardó en padecer el vandalismo. Y al poco tiempo hubo que protegerlos, aun que el remedio fue peor que la enfermedad. Sospecho que era la única plaza (en el nomenclátor figura como tal) cerrada a cal y reja. Una contradicción lacerante. El resultado de aquel fracaso inapelable se comprende al analizarlo con la experiencia actual: el barrio no estaba preparado aún para entender lo que significaba aquella tímida operación de esponjamiento”* (Permanyer, 2002-03-05: 2).

With time, the space became permanently closed until 2001, after more than a decade, when it was redesigned by means of an intervention that involved the demolition of the entire perimeter of the wall and the opening of the red building's façade converting it into the design it has today. *“Ha permanecido clausurada hasta que ahora, con la reurbanización profunda operada en todo el barrio, ha llegado el momento oportuno para reconsiderar este espacio. Y se ha hecho lo que era menester: eliminar los muros y abrirlo de par en par”* (Permanyer, 2002-03-05: 2).



Fig. 337 The square in 2001 being remodeled and the façade already rehabilitated. On right the square nowadays (CR Polis, 2001) (Author, 2017)



## Plaça George Orwell

In some cases, spaces did go through total remodeling but were rather subjected to few modifications as in the case of Plaça George Orwell discussed previously. This demonstrates that in some cases very small changes a priori like correcting or improving some shapes and design elements could adjust the user's perception of the space and enhance its image.

After it was created in 1991, the square had a slightly different shape than it has nowadays.

The triangular form was in fact a raised platform elevated of 2 to 3 steps highlighting the triangular shape of the square and protecting the space from vehicular circulation. And Leandre Cristòfol's sculpture was placed on the platform itself.

Pine trees were orderly placed in triangular planters accentuating the shape of the pavements concentrated on one half of the triangle leaving the rest of the platform free.



**Fig. 338** Plaça George Orwell right after being constructed (Unknown, 1991. AFB)



**Fig. 339** The sculpture being installed in the square in 1992 (Unknown, 1992. AFB)

However, the location of the square attracted all forms of delinquencies, violence, vandalism and drugs, hence its alternative popular name 'tripi'. During the day it was used by children and neighbors, but at night it became a spot for vagrants, prostitutes, drug trafficking, and groups of young people, 'botellón', drinking, and making noises at night that usually ended in quarrels and fights (Placer, 2010-10-14).

This issue caused large conflicts, claims and protests from the neighbors and businesses in the square's perimeter.

When all safety measures were to no avail, the government tried to take measure by placing surveillance cameras, in 2001, one of the first in the city. The cameras caused controversies in the city concerning their efficiency and their social ethics –Orwell's 1984 and the omnipresent eye of the "big brother"– which was in addition ironic concerning the square's name.

*"Dos sensibilidades: esto es lo que verán los ojos electrónicos [...] Los que aplauden la instalación de cámaras de video vigilancia y los que las critican. Los que piden mano dura: "Aquí hace falta más policía"; y los que quieren una política de ayuda social: "Faltan educadores". [...] Si lo sé no vengo diría posiblemente hoy Orwell al saber que el rincón de su homenaje será a finales de julio un gran plató real bajo la supervisión de la Guardia Urbana. "¡Ojo con el ojo!", exclaman algunos..." (Peirón, 2001-06-29: 7).*

According to Manel Andreu the president of Barcelona's neighborhood associations FAVB, *"el problema de los niños de la calle no se soluciona con más cámaras ni con más policías, como pide el alcalde, sino con medidas sociales", and that the 'Ley de Protección de la Infancia' should be applied by helping young people and children and not repressing them"* (Peirón, 2001-06-29: 7).

When asked in an interview of what would Orwell's opinion be, the writer Victor Alba commented that *"Denunciaría el plagio que le hace el programa televisivo, y diría que colocar cámaras en la calle revela una mentalidad policíaca. Una mentalidad ineficaz, porque los cajeros de los bancos también tienen cámaras pero los atracos afuera no disminuyen por ello. Los robos en una calle con cámaras disminuirán, pero se trasladarán a otra"* (Madueño, 2001-06-29: 7).





**Fig. 340** The camera watching the different uses of the square during the day (families) and during the night (young people and vagrants) (Peirón, 2001-06-29. LVG) (Fuentes, 2004.Flicker) (Placer 2010-10-14. El Periódico)



However, the cameras were not enough and the neighbors remained suffering from the situation placing banners of *"Volem un barri digne"* demanding for a dignified neighborhood. The fact is that the square was identified as one of the 24 public spaces with "black points of coexistence" according to a report produced by the district of Ciutat Vella:

*"El distrito de Ciutat Vella ha elaborado un informe en el que especifica exactamente en qué lugares públicos hay problemas de convivencia a causa de "la pernocta de indigentes, el consumo de alcohol, la generación permanente de suciedad, la venta ambulante" y otras "dinámicas de riesgo" como el consumo de drogas, el "nomadismo urbano" o el "turismo de mochila" (Albarrán Bugié, 2009-11-13).*

The report is based on a constantly updated list where certain types of conflicts had been occurring in public spaces and the list included Plaça del Teatre, Plaça de Joaquim Xirau, Plaça Joan Coromines, Plaça del Angel, Carrer d'en Robador, among others.

The district's councilor, Itziar González, announced in the Consell de Distrito the need to create such a list as well as a plan to prevent risked situations in public spaces such as the elaboration of the *"Pla de treball per a la prevenció en situacions de risc a l'espai public"* in order to manage and maintain the quality of public space and face this "nomadismo urbano", and *"impide que los vecinos puedan disfrutar de este espacio público"* (Albarrán Bugié, 2009-11-13).

In 2011, the urban form of the square was modified with the intent of eliminating delinquencies by converting it into a more familiar space. The triangular platform was modified by removing the three steps leading to it and converting it to a single inclined



triangular level. The principle motive was to prevent the platform from being the meeting point of mass gatherings and uncivil behavior especially at night.

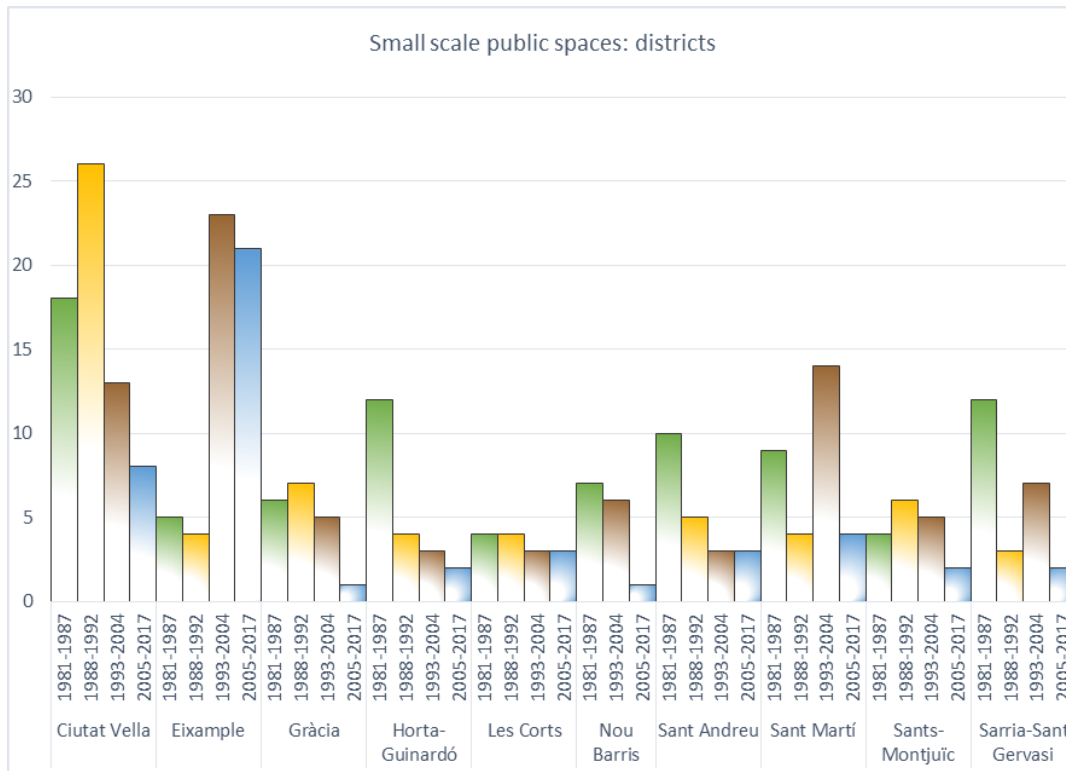
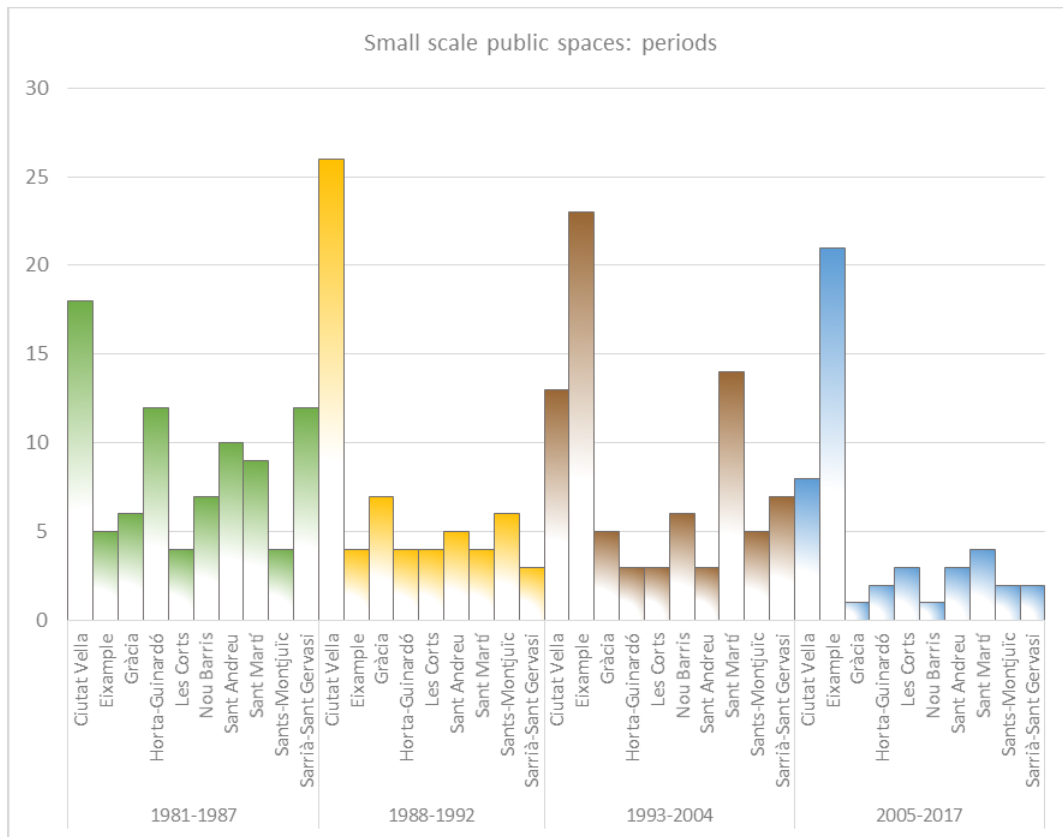
Further repairs were applied to the pavement and the sewers. The sculpture has been relocated on the new single level of the square and this is when the new playground was installed to encourage and facilitate family usage of this public space (Foment Ciutat Vella).

Upon the request of the residents, there are no benches in the square, except for two chairs in the playground, to prevent it from becoming a haunt for vagrants.

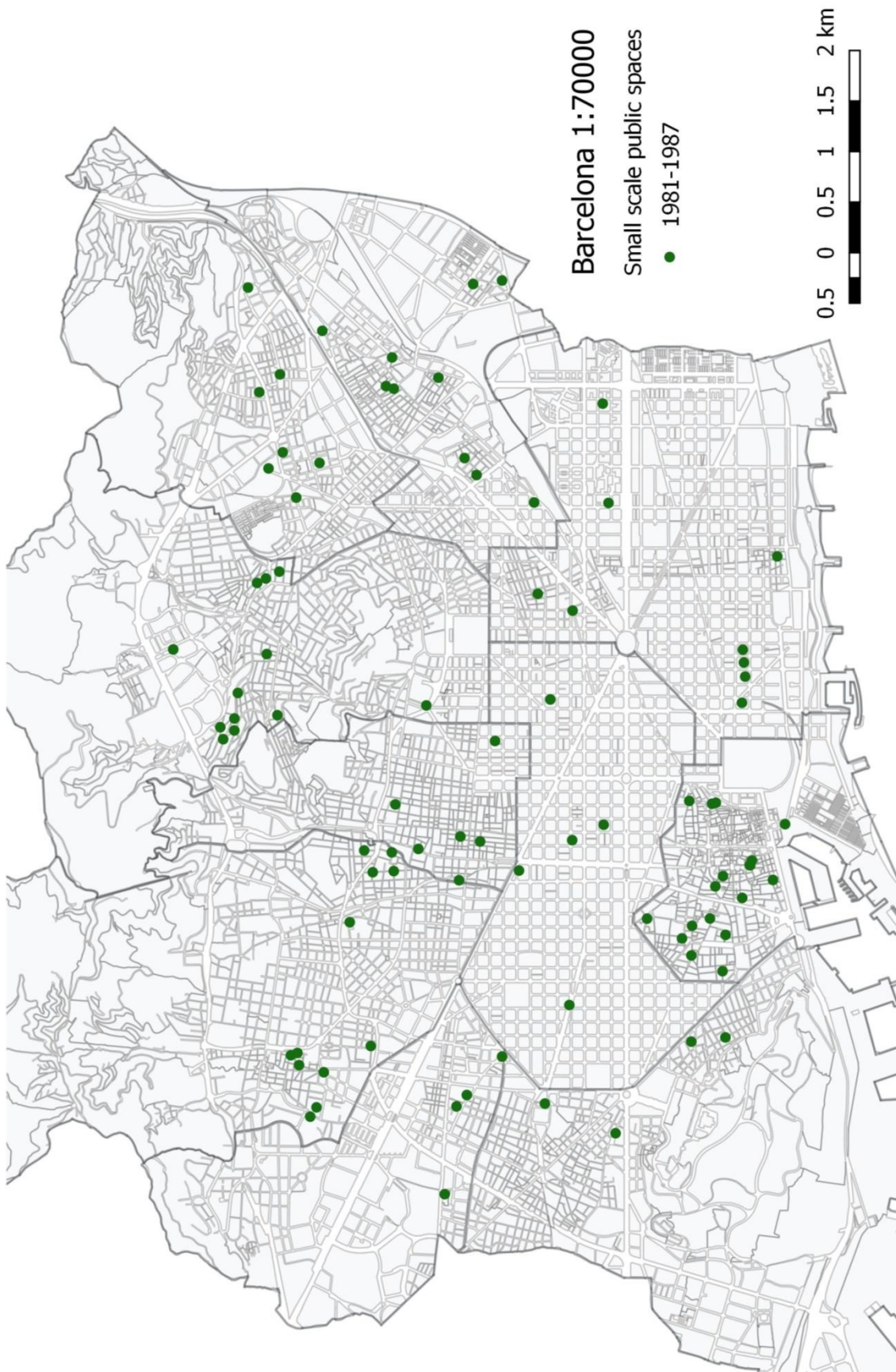
The new design was able to improve the situation but up to a certain level because the roots of the problem is a social issue that needs to be taken care of through civic and social incentives, policies and agents. In this present day Plaça George Orwell is found with fewer delinquents but with double the terraces trying to keep up with the massive flow of tourists using the square almost 24hrs a day.



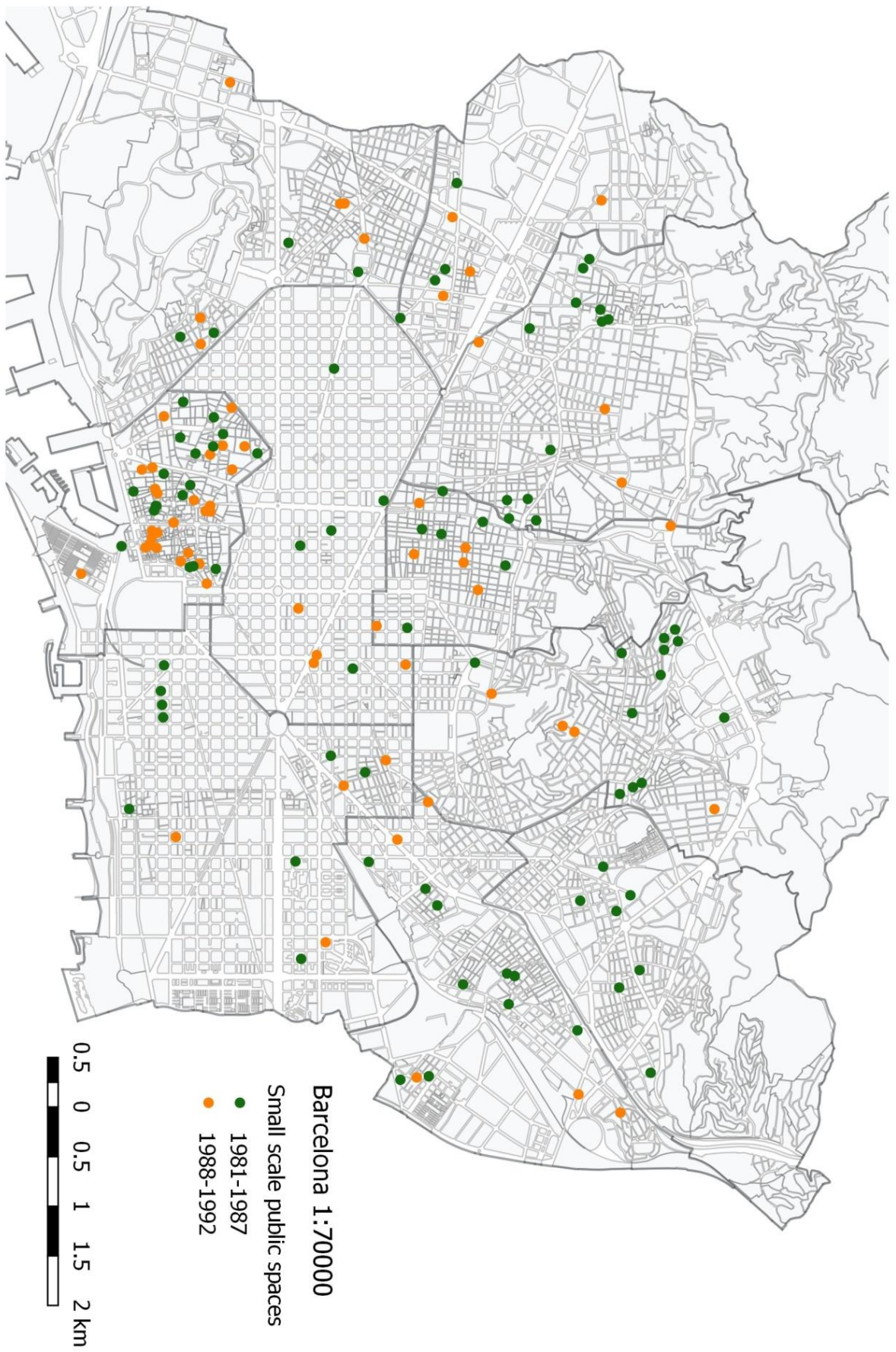
**Fig. 341** The square before with the platform and after being remodeled (Foment Ciutat Vella) (Author, 2011)

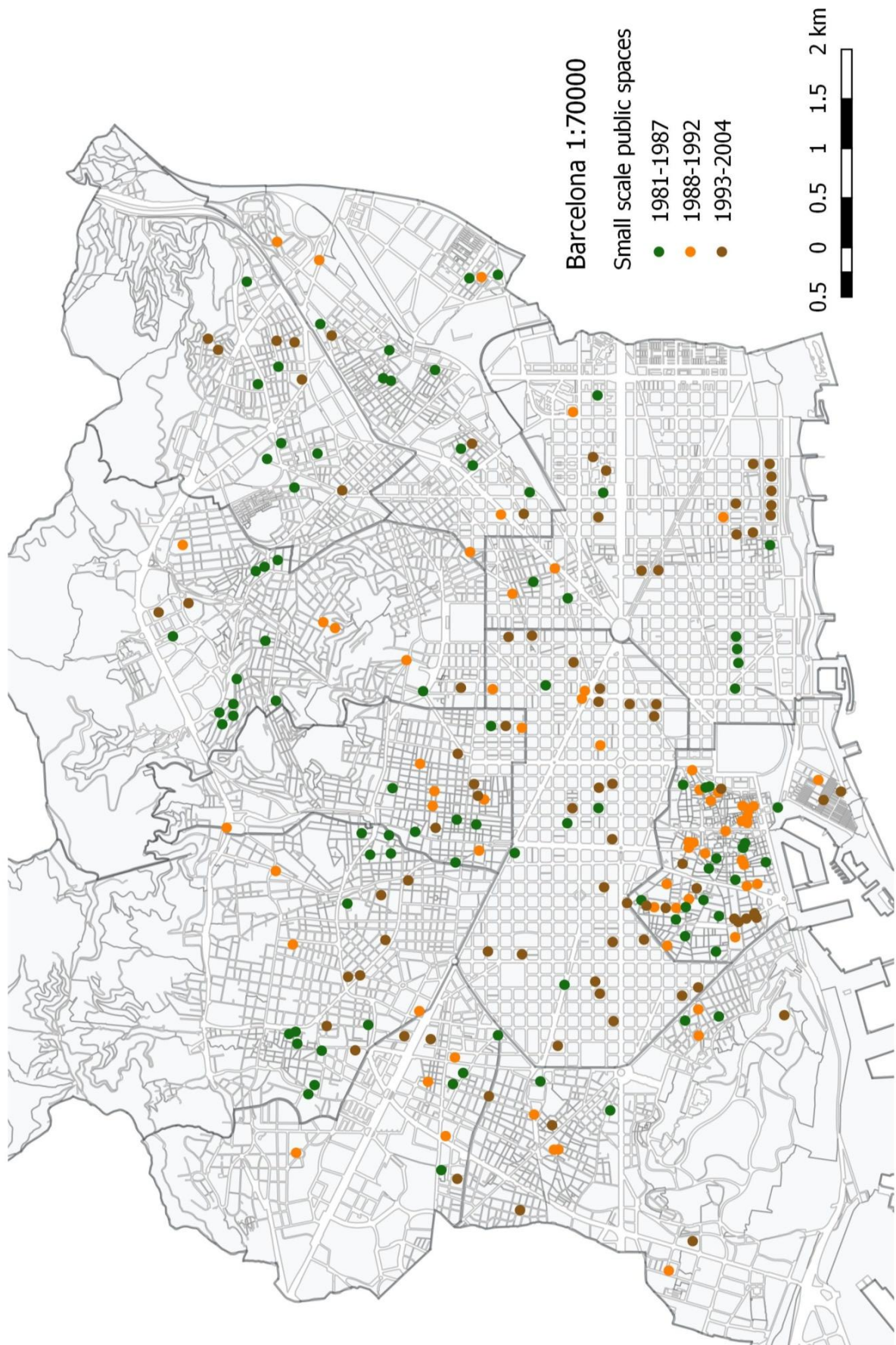


Graphs showing small-scale public spaces between 1981 and 2017 across all districts. (Author's elaboration)

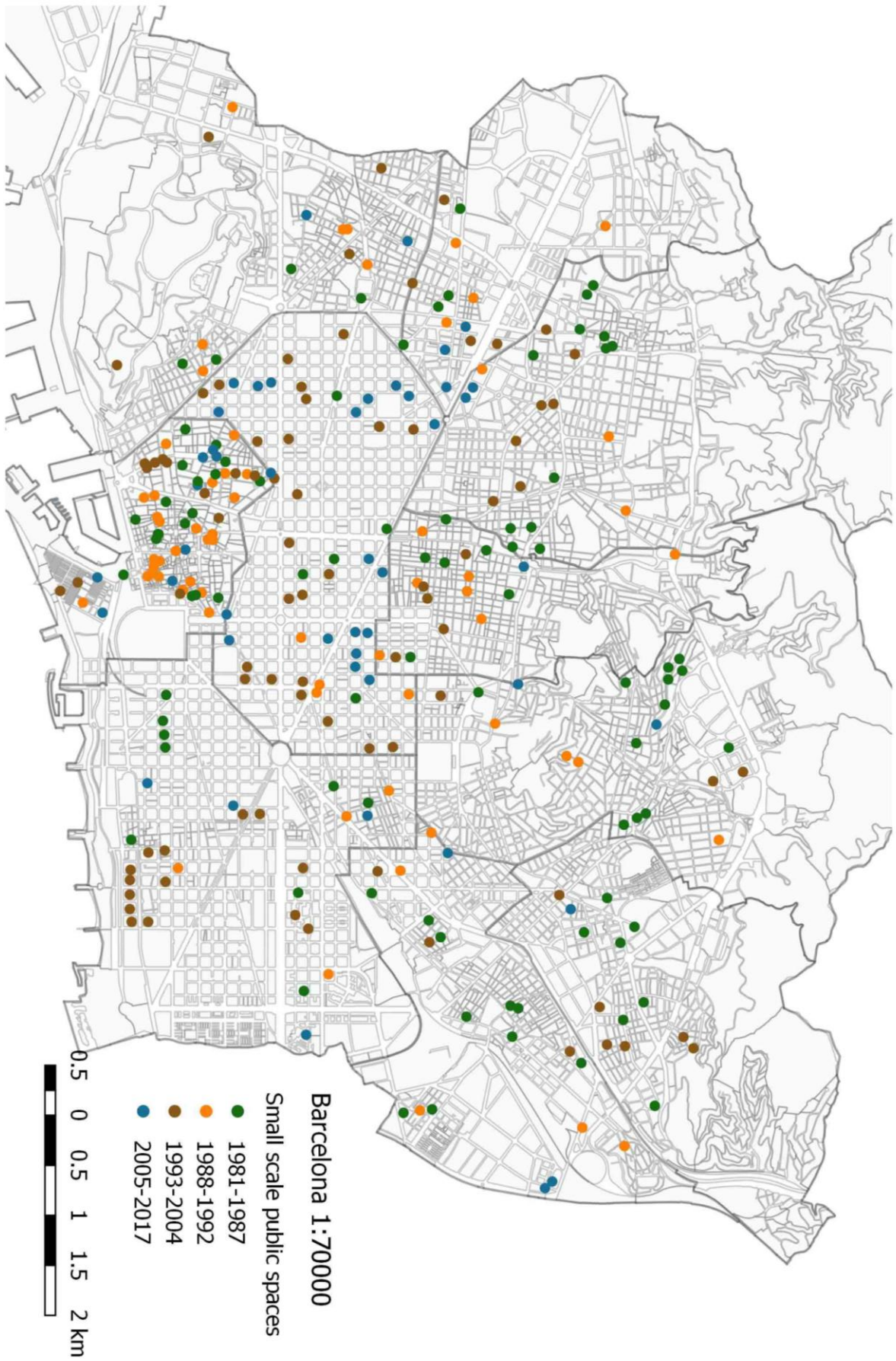














Maps showing small-scale public spaces between 1981 and 2017. (Author's elaboration using cartographic sources from the Ajuntament de Barcelona and QGIS software. See annex.)

## **CONCLUSIONS AND REFLECTIONS**

The objective of demonstrating the importance of small-scale public spaces –squares and gardens- in the development and recovery of the city, led this investigation to go into the problems that the industrial city was facing in the 19<sup>th</sup> century in terms of hygiene and quality of living up until our present day.

Urban hygiene a common drive:

The investigation demonstrates that the developments and recovery of cities are rooted in the common concern of urban hygiene, which drove governments and city councils to take measures and reverse the problems the industrial cities of the 19<sup>th</sup> century were facing.

The problems of overpopulation, housing shortages, and unhealthy living standards were generated from the households into the streets and surrounding environment thus contaminating them and causing long epidemics that led to high mortality rates.

Cities were not prepared and their urban fabric was not ready to receive the vast number of industries and dwellers that were immigrating from rural areas, –leaving a different, maybe healthier but less resourceful life– into the city with the hope of better opportunities unaware of the challenges awaiting them in the cities; more poverty, drastic living conditions, hardships, diseases and mortality.

The research demonstrates, from the first experiences in London and Paris, that achieving urban hygiene beyond the scope of ‘cleanliness’ is through reforming and redeveloping the urban morphology and fabric of the city. Thus, this was materialized in the creation of new health legislations, adequate sewage systems as in London, and urban transformations and changes as in Paris.

Since the end of the 19<sup>th</sup> century, and more specifically during Haussmann’s period, achieving urban hygiene was through this ‘creative destruction’ of the historic center, the ‘eventrement’ of the city through opening rectilinear and longitudinal straight lines. And this makes ‘eventrement’ a key issue in the investigation revisited in Barcelona’s interior reform. The city was opened up to provide its neighborhoods with more air, light, and ventilation. The negative outcome is that it meant the destruction of historic neighborhoods and extensive expropriations, as well as a change in the city’s original fabric for the sake of providing air, light and ventilation. The positive outcome is taking advantage of this opportunity to modernize and aesthetically embellish the city with new monumental buildings, grand avenues and boulevards, and new emblematic parks and promenades. In spite of the latter, Haussmann’s procedure was highly criticized for the devastating destructions it caused as well as for it being a financially expensive process.

In studying Barcelona, the research reveals that the city faced the same worries and hygiene problems in the dense and enclosed old town. Furthermore, it demonstrates the fact that the first attempts of urban hygiene were through the creation of small-scale

public spaces through the elimination of cemeteries by the royal decrees and the confiscation of ecclesiastic land. Through the exhumation of cemeteries and the confiscated lands the city gained its culture of small-scale squares and gardens that still persists nowadays.

After, came the tearing down of the walls and the expansion into the new city. Cerdà, with his Ensanche plan paid close attention to urban hygiene and the importance of squares and gardens in the urban fabric, as well as for the well being of families, children, and old people. This is reflected in his studies of orientations, ventilation, circulation, and most importantly in providing the blocks in his grid interior small-scale squares and gardens. Moreover, he drafted a preliminary sewage system that was continued and progressed with García Fària.

Reaction to 'eventrement':

On the other hand, concerning the interior reform of the old town (and of course keeping in mind the Carrer Ferran-Jaume-Princesa axis), the research demonstrates that Cerdà proposed the opening up of its urban fabric with three axes upon which Baixeras based his ambitious interior reform plan. In other words, the old town's interior reform was through the 'eventrement'. Hence, the first artery was opened, the Via Laietana, which from then on two important reactions happened:

1. The creation of the Gothic Quarter: the amount of destruction of historic buildings and streets caused a collective conscience and awareness to the lost roots and heritage.
2. And second, which is one of the main focuses of this thesis: Florensa's creation of small-scale public spaces through 'esponjamiento' as a contrast to the opening of rectilinear streets, as well as his contributions and operations in the Gothic Quarter. With these spaces his purpose was to cause as less damage as possible to the urban fabric at the same time achieve hygiene and ventilation; add extra value to the monuments or buildings in their vicinity; and consider deeply aesthetic values focusing on design details and pavement. The coming of the war and the destruction it caused also helped in taking advantage of the destructions and creating small-scale squares.

The 'esponjamiento' was a sort of reaction, an alternative solution to the 'eventrement' happening in the European cities. It is clearly reflected in the early 20<sup>th</sup> century, advocated by the new urban values formulated mainly in the 1930s with:

- 1- Giovannoni and his Diradamento theory that suggests the careful and precise 'grafting' of the old town, and
- 2- The 1931 Athens Charter that shaped the GATCPAC's Sanitation Plan for Barcelona's old town where, rather than opening major roads, they insisted on providing the basic principles of health –ventilation and sunlight– through selectively or 'surgically' emptying spaces in deteriorated areas, and convert them into public spaces and equipments without affecting the city's historic, cultural and environmental values



and patterns. However, the GATCPAC, in their "Plan Macià" developed with Le Corbusier, planned the destruction of an important part of the historic center of the city, including that of the Barceloneta neighborhood.

Florensa, influenced by these concepts, had the opportunity to realize these operations in the different areas of the old town during the period of approximately 30 years.

As a matter of fact, the other two axes in Baixera's plan were modified numerous of times with the Darder, Vilaseca and the 1959 partial plan, but they were not fully executed for the same reasons: destruction of historic monuments, expropriation, and high economic costs of the procedure. In fact, the axes were partially executed after taking advantage of the bombings during the Civil War, with the Avinguda de la Catedral and Avinguda Francesc Cambó (part of Via C), and Avinguda de les Drassanes, and more recently the Rambla del Raval (part of Via B).

In the meantime, with the rise in population and the aggregation of the neighboring towns, the Eixample lost its interior courtyards but thanks to the works of Forestier and Rubió i Tudurí this loss was more or less compensated through the creation of a system of parks and gardens. The research also shows that the events that happened in the city at that time such as the 1888 and 1929 Universal Expositions, the XXXV Eucharistic Congress and the first Urbanism Congress in 1952, were a motor in providing the city with its network of open spaces.

A constant cycle:

In the dictatorship era, –through relying in this thesis on photographic and newspaper archives as well as the City Council's public art web– outside the old town a series of parks and small-scale squares were created through the 'Parks and Gardens Department'. However, they were overshadowed by the Plan Comarcal's imbalances and disequilibrium caused by; the waves of immigration and housing shortages; the city's uncontrollable growth towards the peripheries; speculation; the appearance of slums, housing and industrial estates; occupation of free spaces; and the opening of new road systems like the 'Cinturones' which were a modern day 'eventrement' tearing and fragmenting the urban fabric and neighborhoods.

The end of the Francoist and Porcioles's eras meant the rise of the social movements and neighborhood associations that fought and struggled to reclaim their public spaces and facilities.

The seeds of the struggle were fruitful in the democratic era when Bohigas, through the urban project, began reconstructing Barcelona with small-scale public spaces, that was at the time the solution to the shortages the government was facing. Through his policy of 'higienizar el centro and monumentalizar la periferia', Ciutat Vella, the Eixample, and the periphery gained a network of small-scale public spaces, in the form of hard squares and square-gardens, that through this 'metástasis', restructured neighborhoods and provided

a better quality of life. In other words, Bohigas reclaimed Florensa's 'esponjamiento' strategy to regenerate the city.

The 'casos de trabajo' demonstrate that in the dense urban fabric, or fine grain morphology, they provided a form of pressure release points, similar to acupuncture, ventilating the fabric. And in the ones positioned on linear layout, their scale allowed a kind of connection, mending and weaving the two sides of the territory.

With all the names attributed to it, from acupuncture, regeneration spots, urban surgery, etc. they all mean one thing in the case of this thesis; the creation of small-scale public squares and gardens through selective destructions and conversion of residual spaces, which represent Barcelona's commitment to public space, as the engine of a more balanced and socially cohesive urban development.

The research, using the City Council's sources –resulting in the maps and graphs– demonstrates that despite the changes in scales during the 1992 Olympic Games (another event and catalyst in regenerating the city) and the post-Olympic era, the creation of small-scale squares and gardens and the recovery of the existing ones persists until our present day forming a quite large public space network in the city.

The 'esponjamiento' and small-scale public spaces passed from being a strategy of reform in the past to becoming a method of 'hacer ciudad' and an essential part of urban regeneration policies of our present time.

Studying this history of 'esponjamiento' indicates the presence of a long tradition and culture of urban design in Barcelona, and where the scale of its public spaces has, more or less, been relatively small in comparison to other cities, like the Parc de la Ciutadella in comparison to the parks in Paris.

As for the constant maintenance and improvements, even total remodeling as the case studies show, do not necessarily mean the failure of this kind of spaces, but on the contrary. First of all, their small-scale and extensive use allow for constant improvement especially in a city that is always improving and updating itself. Second, it is a process of experimenting and learning from mistakes, thus, to create adequate public spaces means some were a failure. And based on this thought, by observing the new or remodeled squares and gardens nowadays, we notice that the city is learning that the solution is to create simple, flat, open and multifunctional spaces that allow a better, diversity, safety, connectivity, accessibility, and coexistence.

The cases studied in the thesis demonstrate that the commitment to the development of a quality public space, through small-scale operations, has not been easy. Some of the operations studied took a certain form at the beginning of the democratic period, which have been transformed later. The cases studied demonstrate the need for learning about the "language of public space", a language that does not support anymore the adaptation, more or less mimetic, of the solutions proposed in earlier decades and even earlier

centuries, and does not allow certain language experiments that have been proved incompatible with public space and its users in Barcelona.

The thesis shows that the heart of the so-called "Barcelona model" of public space does not reside in infrastructure and road operations, as in the Ronda belt, but in the systematic development of these small-scale operations that, over time, define the personality of the city's neighborhoods and of the city itself. These small-scale operations, close to the citizens, contribute to the improvement of urban living conditions and quality, and increase the citizens' pride with respect to their neighborhood and city.



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## ANNEX

Table demonstrating the small-scale squares and gardens that correspond to the graphs and maps. The information this table provides is the space, year, district, and/ or precedent year of creation, as well as the the year they were renovated or remodeled, and the last column correspond to the period they were created in.

No.	Latitude	Longitude	Name	Other	Year	Architect	District	1 <sup>st</sup> Created	Renov 1	Renov 2	Period
1	41.3837539	2.1824803	Fossar de Les Moreres		1989	C. Fiol	Ciutat Vella				1988-1992
2	41.376324	2.173823	Jardins de Dolores Aleu		2013		Ciutat Vella				1993-2004
3	41.3769187	2.1728869	Jardins de les Voltes d'En Cirés		1995		Ciutat Vella				1993-2004
4	41.376435	2.170355	Jardins de Sant Pau del Camp				Ciutat Vella	1950s			1988-1992
5	41.381831	2.169688	Jardins del Dr. Fleming	Plaça			Ciutat Vella	1947	2014		1988-1992
6	41.381345	2.166834	Jardins Emili Vendrell		1982	B. Galí, R. Clotet, R. Solanich	Ciutat Vella		2001		1981-1987
7	41.3818369	2.1792156	Pati d'En Llimona		1985		Ciutat Vella	Historic			1981-1987
8	41.384376	2.177656	Plaça Berenguer el Gran		2015	Jordi Henrich	Ciutat Vella	1936			2005-2017
9	41.3847806	2.1655566	Plaça Castella		1981		Ciutat Vella	1946	2008		1981-1987
10	41.380446	2.167142	Plaça d'Aureli Capmany		2007		Ciutat Vella				2005-2017
11	41.383719	2.174946	Plaça de Frederic Marés	carrer de la palla	1990	M.L. Aguado	Ciutat Vella				1988-1992
12	41.3767350	2.1740082	Plaça de Jean Genet		1997		Ciutat Vella				1993-2004
13	41.381055	2.171161	Plaça de la Gardunya		2015		Ciutat Vella	Historic			2005-2017
14	41.379291	2.179354	Plaça de la Mercè		1983	R. Clotet, R. Sanabria, P. Casajoana	Ciutat Vella		2009		1981-1987
15	41.3867900	2.1812870	Plaça de la Puntual Allada Vermell	Allada Vermell	1992		Ciutat Vella				1988-1992
16	41.380944	2.177472	Plaça de la Verònica				Ciutat Vella				1988-1992
17	41.3877253	2.1810128	Plaça de l'Acadèmia		1987		Ciutat Vella				1981-1987
18	41.383845	2.178591	Plaça de l'Àngel		1991	A. Arriola, J. Artigues	Ciutat Vella				1988-1992
19	41.3820642	2.1678478	Plaça de les Caramelles		1990	C. Cirici / Cirici, Bassó	Ciutat Vella		2009		1988-1992
20	41.3836545	2.1831032	Plaça de les Olles		1990	J. Barjuan	Ciutat Vella				1988-1992

21	41.3881336	2.1799117	Plaça de Marquilles		1990		Ciutat Vella				1988-1992
22	41.3851133	2.1740488	Plaça de Pi i Sunyer		1992		Ciutat Vella				1988-1992
23	41.381642	2.178667	Plaça de Regomir				Ciutat Vella				1981-1987
24	41.3879018	2.1806234	Plaça de Sant Agustí Vell i les Basses de Sant Pere		1983	R. de Cáceres	Ciutat Vella	Historic			1981-1987
25	41.3867306	2.1799372	Plaça de Sant Cugat		1990		Ciutat Vella	1941			1988-1992
26	41.389513	2.178944	Plaça de Sant Pere				Ciutat Vella	Historic			1981-1987
27	41.383439	2.181774	Plaça de Santa Maria		1990		Ciutat Vella	Historic			1988-1992
28	41.384198	2.169084	Plaça de Vicenç Martorell				Ciutat Vella	1957			1988-1992
29	41.3829897	2.1811314	Plaça de Victor Balaguer		1990		Ciutat Vella				1988-1992
30	41.3808375	2.1708437	Plaça del Canonge Colom		1983	SPU	Ciutat Vella	1947			1981-1987
31	41.380222	2.163861	Plaça del Dubte				Ciutat Vella				1988-1992
32	41.383101	2.190011	Plaça del Gas		2006	EMBT	Ciutat Vella				2005-2017
33	41.3796843	2.1661929	Plaça del Pedró		1983	Briones-Dalmau-Marques	Ciutat Vella	Historic	2012		1981-1987
34	41.3796008	2.1895611	Plaça del Poeta Boscà		1998		Ciutat Vella				1993-2004
35	41.378969	2.175702	Plaça del Teatre				Ciutat Vella	Historic			1988-1992
36	41.385497	2.174522	Plaça del Vuit de Març		1988		Ciutat Vella				1988-1992
37	41.3827281	2.1669568	Plaça dels Àngels		1995	R. Meier & Partners, F. Ramos i associats	Ciutat Vella				1993-2004
38	41.3790304	2.1917570	Plaça d'Hilari Salvadó		1997		Ciutat Vella				1993-2004
39	41.3851438	2.1748889	Plaça d'Isidre Nonell		1988		Ciutat Vella				1988-1992
40	41.3767364	2.1674910	Plaça Folch i Torres		1985	Rosa Maria Clotet	Ciutat Vella	1957	2011	2017	1981-1987
41	41.3805161	2.1772885	Plaça George Orwell		1991	J. Barjuan, L. Cristòfol	Ciutat Vella		2011		1988-1992
42	41.3834680	2.1808226	Plaça Jacint Reventós		1990		Ciutat Vella				1988-1992
43	41.3855243	2.1814045	Plaça Jaume Sabartés		2007		Ciutat Vella				2005-2017
44	41.3815035	2.1687318	Plaça Joan Amades				Ciutat Vella				1981-1987
45	41.383509	2.166050	Plaça Joan Coromines				Ciutat Vella		2009	2014	1988-1992
46	41.3784360	2.1767754	Plaça Joaquim		1990		Ciutat Vella		2007		1988-

			Xirau								1992
47	41.382026	2.185035	Plaça Pau Vila		1983	SPU Beth Gall	Ciutat Vella				1981-1987
48	41.3772107	2.1719271	Plaça Pere Coromines		1995		Ciutat Vella				1993-2004
49	41.377672	2.171867	Plaça Pieyre de Mandiargues		1995		Ciutat Vella				1993-2004
50	41.3812110	2.1908223	Plaça Pompeu Gener		1989	David Mackay, Josep Martorell	Ciutat Vella				1988-1992
51	41.386829	2.181836	Plaça Pons I Clerch				Ciutat Vella				1993-2004
52	41.381688	2.178636	Plaça Regomir		1984	SPU Rosa Clotet	Ciutat Vella				1981-1987
53	41.3801000	2.1752700	Plaça Reial		1983	F. Correa, A. Milà, A. Gaudi	Ciutat Vella	Historic 1950			1981-1987
54	41.3820209	2.1712627	Plaça Sant Galdric		1994	J. Fargas	Ciutat Vella				1993-2004
55	41.3841000	2.1655166	Plaça Terenci Moix				Ciutat Vella				1993-2004
56	41.3855048	2.1640917	Plaça Universitat		1995	M. Priel	Ciutat Vella	Historic			1993-2004
57	41.379637	2.168376	Plaça Vázquez Montalbán		2008		Ciutat Vella				2005-2017
58	41.3844880	2.1721610	Plaça Vila de Madrid		2002		Ciutat Vella	1958			1993-2004
59	41.3825122	2.1739825	Places del Pi y de Sant Josep Oriol		1983	SPU Rosa Clotet	Ciutat Vella	Historic			1981-1987
60	41.380534	2.187472	Placeta de Joan de Borbó		2011		Ciutat Vella				2005-2017
61	41.382677	2.175484	Placeta de Manuel Ribé				Ciutat Vella				1981-1987
62	41.3798098	2.1668701	Placeta de Martina Castells i Ballespi		2009		Ciutat Vella				2005-2017
63	41.3842997	2.1823220	Placeta de Montcada		1990		Ciutat Vella				1988-1992
64	41.3844330	2.1821750	Placeta del Comerç	Placeta de Montcada	1991	J. Henrich	Ciutat Vella				1988-1992
65	41.3788266	2.1707779	Plaza Salvador Seguí		1982		Ciutat Vella		2012		1981-1987
66	41.3912604	2.1481641	Escola Mallorca		2004		Eixample				1993-2004
67	41.3934048	2.1697729	Jardí de la Torre de les Aigües		1987	C. Ribas, A. Arriola, R. Llimós	Eixample				1981-1987
68	41.400407	2.170219	Jardinet Roger de Flor 191		2013		Eixample				2005-2017
69	41.3911030	2.1796392	Jardins Av. Vilanova/Passeig de Sant Joan		2010		Eixample				2005-2017
70	41.4018281	2.1719613	Jardins Beatriu de Provença		2008		Eixample				2005-2017
71	41.388890	2.150827	Jardins Beatriu Pinós-Milany		2010		Eixample				2005-

										2017
72	41.3777563	2.1632049	Jardins Càndida Pérez		2008		Eixample			2005-2017
73	41.3973061	2.1752886	Jardins Carlit		1990		Eixample			1988-1992
74	41.4034159	2.1701229	Jardins Caterina Albert		1989		Gràcia			1988-1992
75	41.3990900	2.1730999	Jardins Constança d'Aragó		2008		Eixample			2005-2017
76	41.3980816	2.1812950	Jardins d'Anaïs Napoleón		1997		Eixample			1993-2004
77	41.3983501	2.1628682	Jardins de Carme Biada		2008		Eixample			2005-2017
78	41.3944213	2.1658401	Jardins de Casa Elizalde		1987		Eixample			1981-1987
79	41.3839239	2.1595573	Jardins de César Martinell		1994	A. Ribas	Eixample			1993-2004
80	41.4002081	2.1788574	Jardins de Clotilde Cerdà		1997		Eixample			1993-2004
81	41.3755747	2.1629349	Jardins de Ferràn Sunyer	(escola)	1997		Eixample			1993-2004
82	41.4043229	2.1801047	Jardins de Flora Tristán		2004		Eixample			1993-2004
83	41.3940684	2.1730378	Jardins de Jaume Perich		2003		Eixample			1993-2004
84	41.368314	2.167859	Jardins de Joan Brossa		2004		Sants-Montjuïc			1993-2004
85	41.4077513	2.1709485	Jardins de la Indústria		1990	M. Quintana	Eixample			1988-1992
86	41.3963739	2.1835387	Jardins de Línia Òdena		2000		Eixample			1993-2004
87	41.4009653	2.1801069	Jardins de Manuel de Pedrolo		1997		Eixample			1993-2004
88	41.3905396	2.1682921	Jardins de Maria Callas		1997		Eixample			1993-2004
89	41.3768900	2.1594892	Jardins de Maria Manonellas		2010		Eixample			2005-2017
90	41.386428	2.149425	Jardins de Maria Mercè Marçal		2011		Eixample			2005-2017
91	41.3820847	2.1624077	Jardins de Mercè Vilaret		1994		Eixample			1993-2004
92	41.4086705	2.1788578	Jardins de Montserrat Roig		1997		Eixample			1993-2004
93	41.3807704	2.1460296	Jardins de Safo		2002		Eixample			1993-2004
94	41.3946825	2.1715514	Jardins de Sofia Barat		1999		Eixample			1993-2004
95	41.3958587	2.1588387	Jardins del Palau Robert		1987		Eixample			1981-1987
96	41.3950548	2.1675510	Jardins del Rector Oliveras		2003		Eixample			1993-2004
97	41.3879811	2.1634986	Jardins del Seminari		2003		Eixample			1993-2004
98	41.3889111	2.1508118	Jardins d'Elena Maseras		1997		Eixample			1993-2004



99	41.3825028	2.1546938	Jardins d'Emma de Barcelona		2004		Eixample				1993-2004
100	41.4043364	2.1730707	Jardins d'Enriqueta Sèculi		2010		Eixample				2005-2017
101	41.3865123	2.1515856	Jardins d'Ermessenda de Carcassona		2011		Eixample				2005-2017
102	41.3966319	2.1628971	Jardins Laura Albéniz		2008		Eixample				2005-2017
103	41.3792258	2.1562672	Jardins Maria Matilde Almendros		2008		Eixample				2005-2017
104	41.3814371	2.1540514	Jardins Paula Montal		2003		Eixample				1993-2004
105	41.4012327	2.1692631	Jardins Roger de Flor-Rosselló		2013		Eixample				2005-2017
106	41.3873718	2.1459351	Jardins Rosa Deulofeu		2010		Eixample				2005-2017
107	41.3888448	2.1457324	Jardins Sagrat Cor		2008		Eixample				2005-2017
108	41.3788008	2.1528593	Jardins Sebastià Gasch		1997		Eixample				1993-2004
109	41.3786124	2.1576871	Jardins Tete Montoliu		2008		Eixample				2005-2017
110	41.3760721	2.1608638	Jardins Tres Tombs		2000		Eixample				1993-2004
111	41.3929026	2.1815967	Plaça d'André Malraux		2014		Eixample				2005-2017
112	41.395735	2.182339	Plaça de Fort Pienc		2003		Eixample				1993-2004
113	41.4100863	2.1767559	Plaça de Henry Dunant		1997		Eixample				1993-2004
114	41.384252	2.151808	Plaça del Gall		1984		Eixample	1958			1981-1987
115	41.4046225	2.1757737	Plaça Gaudi		1981	Rubió i Tudurí	Eixample				1981-1987
116	41.401777	2.178626	Plaça Hispanitat		1990	D. Febles	Eixample				1988-1992
117	41.401458	2.177702	Plaça Pablo Neruda		1990	D. Febles	Eixample				1988-1992
118	41.4026060	2.1731580	Plaça Sagrada Família		2010		Eixample	1951			2005-2017
119	41.3922721	2.1459362	Placeta María Luz Morales		2008		Eixample				2005-2017
120	41.3849398	2.1639272	Triangle Ronda de Sant antoni/plaça universitat		2011		Eixample				2005-2017
121	41.4045619	2.1689216	Jardins d'Antoni Puigvert		1995		Gràcia				1993-2004
122	41.4054958	2.1676662	Jardins de la Sedeta		1987	R. Fayos, P. Giol, X. Llistosella	Gràcia				1981-1987
123	41.4077852	2.1540031	Jardins del Mestre Balcells		1984	Parcs i Jardins	Gràcia	Historic			1981-1987
124	41.3990224	2.1529998	Plaça de la Gal·la Placídia		1985		Gràcia	1944			1981-

											1987
125	41.401224	2.160813	Plaça del Raspall				Gràcia	Historic			1988-1992
126	41.415805	2.136555	Plaça Alfons Carles Comín		1992	V. Rahola	Gràcia				1988-1992
127	41.4025018	2.1542725	Plaça Anna Frank		1999	I. Sanfeliu	Gràcia		2001		1993-2004
128	41.4028581	2.1612760	Plaça de John Lennon		1993	Jaume Graells	Gràcia				1993-2004
129	41.4001288	2.1580106	Plaça de la Vila de Gràcia	antigua Rius i Taulet	1984		Gràcia	Historic			1981-1987
130	41.404922	2.157304	Plaça de la Virreina				Gràcia	Historic			1988-1992
131	41.404096	2.155897	Plaça del Diamant				Gràcia	Historic			1988-1992
132	41.4018592	2.1606010	Plaça del Poble Romani		1993	A. Montes	Gràcia				1993-2004
133	41.4016804	2.1567733	Plaça del Sol		1985	J. Bach, G. Mora, J. Camps	Gràcia	Historic			1981-1987
134	41.4058349	2.1624804	Plaça Joanic		2003		Gràcia	Historic			1993-2004
135	41.406971	2.150410	Plaça Lesseps		2009	A. Viaplana	Gràcia	1960			2005-2017
136	41.4075912	2.1584229	Plaça Rovira i Trias		1990	J. Graells, J. Camps	Gràcia	Historic			1988-1992
137	41.40355	2.152203	Plaça Trilla		1984	J. Bach, G. Mora	Gràcia	Historic	1988		1981-1987
138	41.4068633	2.1475410	Plaça Ventura Gassol		1985	Robert Terradas	Sarrià-Sant Gervasi				1981-1987
139	41.3982808	2.1560205	Placeta de Sant Miquel		1988	J. Graells	Gràcia				1988-1992
140	41.4098612	2.1683707	Jardí Príncep de Girona		1995	J. Farrando	Horta-Guinardó				1993-2004
141	41.4314776	2.1483362	Jardins de Can Brasó		1981-1987		Horta-Guinardó				1981-1987
142	41.4366942	2.1569702	Jardins de la Unitat		1989	J. Farrando	Horta-Guinardó				1988-1992
143	41.4326049	2.1524890	Jardins de Rosa Luxemburg		1999	P. Falcone	Horta-Guinardó				1993-2004
144	41.4300979	2.1620431	Jardins de Santes Creus	Plaça de Santes Creus			Horta-Guinardó	Historic			1981-1987
145	41.4246843	2.1501122	Jardins Santa Rosalia		1987	M. Rubert, O. Clos	Horta-Guinardó				1981-1987
146	41.4253067	2.1557884	Plaça de la Pastrana		1986		Horta-Guinardó		2010		1981-1987
147	41.412045	2.164878	Plaça d'Alfons X			arqu. M. Quintana, esc. R. Bartolozzi	Horta-Guinardó				1981-1987
148	41.4296914	2.1637363	Plaça de Barcardí				Horta-Guinardó	Historic			1981-1987
149	41.425420	2.152510	Plaça de la Cosmos		2008		Horta-Guinardó				2005-2017

150	41.4150924	2.1661128	Plaça de la Font Castellana		1991	J. Farrando, Madola / Farrando	Horta-Guinardó		1993		1988-1992
151	41.421689	2.162795	Plaça de la Font de la Mulassa	(triangle)	1988	J. Farrando	Horta-Guinardó				1988-1992
152	41.422552	2.146683	Plaça de la Teixonera		1985	J. Martorell, D. Mackay	Horta-Guinardó				1981-1987
153	41.4303753	2.1609309	Plaça d'Eivissa				Horta-Guinardó	Historic			1981-1987
154	41.4232998	2.1476888	Plaça del Doctor Matias Guiu				Horta-Guinardó				1981-1987
155	41.4227066	2.1450175	Plaça d'Herta Frankel		1985	SPU Carme Ribas	Horta-Guinardó				1981-1987
156	41.4236403	2.1457745	Plaça d'Isop				Horta-Guinardó				1981-1987
157	41.4339152	2.1491682	Plaça Joan Cornudella		1995		Horta-Guinardó				1993-2004
158	41.420293	2.181061	Plaça Maragall		2013		Sant Andreu	1950			2005-2017
159	41.4207998	2.1515736	Plaça Salvador Allende		1985	J. Farrando, M. Martí	Horta-Guinardó		2012		1981-1987
160	41.4140628	2.1608345	Plaça Sanllehy		2015		Horta-Guinardó	1929			2005-2017
161	41.4228165	2.1623024	Racó de l'Olivera		1988	J. Farrando	Horta-Guinardó				1988-1992
162	41.3852514	2.1418622	Jardi Tarradellas				Les Corts				1981-1987
163	41.3802260	2.1255388	Jardins de Bacardi		1983		Les Corts	1960			1981-1987
164	41.3850572	2.1356884	Jardins de Can Cuiàs		1986	SPU Carme Fiol	Les Corts	1967			1981-1987
165	41.3882161	2.1387611	Jardins de Gaieta Renom		2008		Les Corts				2005-2017
166	41.3786496	2.1261524	Jardins de Goday i Casals		1998		Les Corts				1993-2004
167	41.3849922	2.1338726	Jardins de les Infantes		1983	Parc i Jardins	Les Corts	1967			1981-1987
168	41.3892856	2.1358223	Jardins de Sant Joan de Déu		1994	R. Moneo, M. de Solà Morales, B. Figueras	Les Corts				1993-2004
169	41.3911542	2.1338394	Jardins d'Olga Sacharoff		1994	M. Gabàs, C. Casamor	Les Corts				1993-2004
170	41.3880625	2.1350603	Plaça Can Roses		2010		Les Corts	Historic			2005-2017
171	41.386733	2.131963	Plaça de la Concòrdia		1989	Josep Ma Julia, Ramón Marquès	Les Corts	Historic			1988-1992
173	41.3865729	2.1363149	Plaça de Les Corts		1988	C. Fiol	Les Corts				1988-1992
174	41.3819220	2.1358840	Plaça del Centre		2003		Sants-Montjuïc	Historic			1993-2004
175	41.3821269	2.1288162	Plaça del Sol de baix		1989	R. Marqués	Les Corts	1965	1991		1988-1992

176	41.3905701	2.1147002	Plaça d'Eusebi Güell		1991	M.D. Febles	Les Corts				1988-1992
177	41.390669	2.141803	Plaça Dr. Ignasi Barraquer		2009		Les Corts				2005-2017
178	41.449467	2.184871	Jardins de la Trinitat Nova		1987	Pere Casajuana	Nou Barris				1981-1987
179	41.4316651	2.1753823	Jardins del Petit Princep		2010		Nou Barris				2005-2017
180	41.4469276	2.1766271	Plaça Cenicero	Cenicero	1995	M. Gabàs	Nou Barris				1993-2004
181	41.4420169	2.1802936	Plaça d'Àngel Pestaña		1986	SPU E. Pericas	Nou Barris		2001		1981-1987
182	41.4369539	2.1740068	Plaça dels Jardins d'Alfàbia		1981-1987		Nou Barris				1981-1987
183	41.443792	2.182360	Plaça dels Nou Pins		1999		Nou Barris				1993-2004
184	41.4332655	2.1713513	Plaça d'Olof Palme		1986	SPU J.L. Delgado	Nou Barris				1981-1987
185	41.4422000	2.1770700	Plaça Francesc Layret		1986	E. Pericas	Nou Barris		1999	1994	1981-1987
186	41.4397013	2.1811973	Plaça Harry Walker		1999	M. Quintana	Nou Barris				1993-2004
187	41.4368350	2.1714651	Plaça Nou Barris		1983	SPU	Nou Barris				1981-1987
188	41.4482782	2.1767219	Plaça Roquetes		1996	J.L. Delgado	Nou Barris				1993-2004
189	41.4339774	2.1762022	Plaça Sóller		1984	J. M. Julià, J. L. Delgada, A. Arriola, C. Ribas, X. Corberó	Nou Barris				1981-1987
190	41.4425536	2.1837559	Plaça Verda de la Prosperitat		1999		Nou Barris				1993-2004
191	41.4300420	2.1751570	Plaça Virrei Amat		1999	A. Arriola, C. Fiol	Nou Barris	1959			1993-2004
192	41.4233388	2.1883602	Jardins d'Elx		1983		Sant Andreu	1966	2011		1981-1987
193	41.4420840	2.1874927	Plaça de Mossèn Clapés		1983	Vidal	Sant Andreu				1981-1987
194	41.4477450	2.1999654	Plaça Baró de Viver		2011	C. Fuentes	Sant Andreu				2005-2017
195	41.4406221	2.1874773	Plaça de Can Galta Cremat		2000		Sant Andreu				1993-2004
196	41.435534	2.204045	Plaça de Flix	Félix Rodríguez de la Fuente	1987	SPU Olga Tarrasó	Sant Andreu				1981-1987
197	41.4462446	2.1928575	Plaça de la Modernitat		1992	C. Sanfeliu, I. Sanfeliu, E. Valencoso, A. Espejo, B. Martorell	Sant Andreu				1988-1992
198	41.43396	2.188646	Plaça de la Pamera		1984		Sant Andreu	1968	1994		1981-1987
199	41.4500858	2.1908490	Plaça de la		1992	A. Montes	Sant Andreu				1988-



			Trinitat								1992
200	41.4318448	2.1933090	Plaça de Montserrat Roca	(Virgili)	1983	SPU	Sant Andreu				1981- 1987
201	41.434832	2.205177	Plaça de Robert Gerhard		1989	O. Tarrasó	Sant Andreu				1988- 1992
202	41.436026	2.191113	Plaça d'Orfila				Sant Andreu	Historic			1981- 1987
203	41.4183985	2.1865601	Plaça Ferran Reyes		1988		Sant Andreu	1954			1988- 1992
204	41.4179988	2.1908916	Plaça General Moragues		1987	O. Tarrasó, E. Kelly	Sant Andreu				1981- 1987
205	41.4169897	2.1885526	Plaça Islàndia		1995	C. Fiol, A. Arriola	Sant Andreu				1993- 2004
206	41.4247790	2.1901561	Plaça Massadas		1996		Sant Andreu				1993- 2004
207	41.4346147	2.1881994	Plaça Mercadal		1983	R.Sanàbria, R.Artigas	Sant Andreu	Historic			1981- 1987
208	41.433939	2.206770	Plaça Mossén Joan Cortinas		1983	SPU / O. Tarrasó	Sant Andreu		1988		1981- 1987
209	41.447705	2.201133	Plaça Pilar Miró		2007		Sant Andreu				2005- 2017
210	41.4251604	2.1887754	Plaza de l'Assemblea de Catalunya		1982		Sant Andreu				1981- 1987
211	41.417963	2.180736	Triangle Joan de Garay/trinxant/ Avgda. Maragall		1989	O. Tarrasó	Sant Andreu				1988- 1992
212	41.4041588	2.2074212	Jardí Gandhi		2000		Sant Martí				1993- 2004
213	41.4120377	2.1945943	Jardins Clot de la Mel		1998		Sant Martí				1993- 2004
214	41.4048199	2.1951584	Jardins d'Ada Byron		2002		Sant Martí				1993- 2004
215	41.395634	2.196081	Jardins d'Àlicia de Larrocha		1988		Sant Martí				1981- 1987
216	41.4027085	2.2115235	Jardins de Carles Barral		1997	C. Ferrater	Sant Martí				1993- 2004
217	41.393797	2.194030	Jardins de Creu Casas		1988		Sant Martí				1981- 1987
218	41.4011852	2.2093719	Jardins de Jaime Gil de Biedma		1997	C. Ferrater	Sant Martí				1993- 2004
219	41.4017934	2.2102940	Jardins de Joan Fuster I Ortells		1997	C. Ferrater	Sant Martí				1993- 2004
220	41.4045445	2.2136752	Jardins de Josep Maria Sosters		1997	C. Ferrater	Sant Martí				1993- 2004
221	41.4040923	2.2051853	Jardins de Josep Trueta		1989		Sant Martí	1961			1988- 1992
222	41.4036236	2.2127531	Jardins de Manuel Sacristan		1997	C. Ferrater	Sant Martí				1993- 2004
223	41.392361	2.191572	Jardins de Margarida Comas				Sant Martí				1981- 1987
224	41.394765	2.195102	Jardins de Merce Plantada		1988		Sant Martí				1981- 1987

225	41.4036451	2.1952352	Jardins de Miquel Martí i Pol		2009	Jordi Badia, Jordi Farmis	Sant Martí				2005-2017
226	41.4021323	2.2048385	Jardins de Simon de Beauvoir		1995		Sant Martí				1993-2004
227	41.4058645	2.1936989	Jardins d'Irene Polo		2002		Sant Martí				1993-2004
228	41.4162244	2.1992804	Plaça Angeletta Ferrer		1995		Sant Martí				1993-2004
229	41.4120409	2.1835671	Plaça de Can Robacols		1987	P. Barragán / C. Fuente (entorn)	Sant Martí		2006		1981-1987
230	41.4128184	2.1847172	Plaça de Carme Monturiol		2006		Sant Martí				2005-2017
231	41.401223	2.206402	Plaça de Juli González		1995	J. Bellmunt	Sant Martí				1993-2004
232	41.4132931	2.1970936	Plaça de la Infància		1984		Sant Martí				1981-1987
233	41.4198845	2.2049153	Plaça de la Palmera		1985	P. Barragán, B. de Sola, R. Serra	Sant Martí				1981-1987
234	41.422804	2.208431	Plaça de la Pau		2013		Sant Martí				2005-2017
235	41.4087941	2.1850787	Plaça de l'Oca		1983		Sant Martí				1981-1987
236	41.4055998	2.2122695	Plaça de Ramon Calsina		2001	M. Gabàs, C. Casamor	Sant Martí				1993-2004
237	41.4203833	2.2014172	Plaça del Ram de l'Aigua		1989	J. Heindrich, L. Lamich, B. Martorell, C. Sanfeliu	Sant Martí		1999		1988-1992
238	41.4145189	2.1992299	Plaça dels Porxos		1994	Moisés Gallego, Franc Fernández	Sant Martí		2007		1993-2004
239	41.4115289	2.1865337	Plaça Dr. Serrat		1989	J. Henrich	Sant Martí	1961			1988-1992
240	41.396757	2.200621	Plaça Mercè Sala		2013		Sant Martí				2005-2017
241	41.399320	2.206779	Plaça Prim		1986	B. de Solà, P. Barragán	Sant Martí	Historic			1981-1987
242	41.4125970	2.1807761	Plaça Sant Josep de Calasanç		1991		Sant Martí	1960			1988-1992
243	41.3789380	2.1327478	Jardins Can Mantega		2015		Sants-Montjuïc	1962			2005-2017
244	41.3596721	2.1408045	Jardins de la Mediterrània	Illa interior Alts Forns, Foneria, Mare Déu Port	1995	J. Henrich	Sants-Montjuïc				1993-2004
245	41.3743603	2.1368456	Plaça Bonet i Muxí		1992		Sants-Montjuïc	Historic	2011		1988-1992
246	41.3708508	2.1391207	Plaça de Can Muns		2006		Sants-Montjuïc				2005-2017

247	41.3732963	2.1449669	Plaça de Joan Corrades		1981-1987	Sants-Montjuïc				1981-1987
248	41.3742800	2.1589847	Plaça de les Navas		1982	D. Navas, N. Solé, I. Jansana, J. Rebull	Sants-Montjuïc		2012	1981-1987
249	41.3726486	2.1288012	Plaça de l'Olivereta		1998	M. Periel	Sants-Montjuïc			1993-2004
250	41.3593053	2.1362613	Plaça de San Cristòfol	i Jardins de l'Arboreda	1991	R. Marqués	Sants-Montjuïc			1988-1992
251	41.3724513	2.1588514	Plaça del Doctor Pere Franquesa	antiguo Sancho Marraco	1990	J. M. Julià, R. Marqués	Sants-Montjuïc			1988-1992
252	41.3741667	2.1610644	Plaça del Setge de 1714		1990	R. Marqués, X. Corberó	Sants-Montjuïc			1988-1992
253	41.3723999	2.1621931	Plaça del Sortidor		1983	SPU	Sants-Montjuïc			1981-1987
254	41.3796061	2.1415222	Plaça dels Països Catalans		1983	A. Viaplana, H. Piñón	Sants-Montjuïc			1981-1987
255	41.374092	2.137230	Plaça d'Iberia		1992		Sants-Montjuïc	Historic	2011	1988-1992
256	41.376055	2.138774	Plaça d'Osca		1998	L. Queral, C. Hom, R. Cardona	Sants-Montjuïc	Historic		1993-2004
257	41.3778760	2.1381559	Plaça Joan Peiró		1991	A. Viaplana, H. Piñón / C. Casamor	Sants-Montjuïc		1992	1988-1992
258	41.3985329	2.1341299	Jardí de les Tres Torres		1995	D. Febles	Sarrià-Sant Gervasi			1993-2004
259	41.4041223	2.1322121	Jardins de Can Altamira		1991	Maria Luisa Aguado	Sarrià-Sant Gervasi			1988-1992
260	41.3933703	2.1284681	Jardins de Joan Vinyoli		1998	C. Casamor, M. Gabàs	Sarrià-Sant Gervasi			1993-2004
261	41.3978664	2.1352762	Jardins de Via Augusta-Ganduixer		1995	D. Febles	Sarrià-Sant Gervasi			1993-2004
262	41.3937402	2.1220508	Jardins de Vil.la Cecília	i Amelia	1986	E. Torres, J.A. Martínez Lapeña	Sarrià-Sant Gervasi	1970		1981-1987
263	41.3918051	2.1372509	Jardins del Dr. Hahnemann		1990	M. L. Aguado, M. Polo	Sarrià-Sant Gervasi			1988-1992
264	41.4016610	2.1439080	Jardins d'Enric Sagnier		2003		Sarrià-Sant Gervasi			1993-2004
265	41.3985150	2.1404416	Plaça Doctor Castelló		1994		Sarrià-Sant Gervasi			1993-2004
266	41.3954838	2.1255932	Plaça d'Artós		1983		Sarrià-Sant Gervasi			1981-1987
267	41.4032678	2.1403252	Plaça de Boston		1983	SPU	Sarrià-Sant Gervasi			1981-1987
268	41.3935516	2.1207417	Plaça de Cirici Pellicer		1984	SPU M.L. Aguado	Sarrià-Sant Gervasi		1988	1981-1987
269	41.3925655	2.1410576	Plaça de Joan		2009		Sarrià-Sant			2005-

			Llongueras				Gervasi				2017
270	41.3967448	2.1281196	Plaça de Joaquim Pena		1995	M. Gabàs	Sarrià-Sant Gervasi				1993-2004
271	41.405003	2.149690	Plaça de la Torre		1985	SPU . M.L. Aguado	Sarrià-Sant Gervasi				1981-1987
272	41.4037034	2.1482910	Plaça de Mañé i Flaquer		1987	M. Luisa Aguado	Sarrià-Sant Gervasi		1988		1981-1987
273	41.4049562	2.1464303	Plaça de Sant Joaquim		1987	M. Luisa Aguado	Sarrià-Sant Gervasi				1981-1987
274	41.397488	2.124118	Plaça de Sant Vicenç de Sarrià		1983	SPU	Sarrià-Sant Gervasi	Historic			1981-1987
275	41.392379	2.139577	Plaça de Wagner		2009		Sarrià-Sant Gervasi				2005-2017
276	41.3941765	2.1317327	Plaça d'Eguilaz		1983	SPU M.L. Aguado	Sarrià-Sant Gervasi				1981-1987
277	41.3983568	2.1250009	Plaça del Xiprer				Sarrià-Sant Gervasi				1981-1987
278	41.4099100	2.1370300	Plaça John F. Kennedy		1988	M. L. Aguado, X. Corberó	Sarrià-Sant Gervasi				1988-1992
279	41.4008867	2.1474608	Plaça Molina		1995	J. Garcés, E. Sòria, A. Montes	Sarrià-Sant Gervasi	Historic	1998		1993-2004
280	41.3986223	2.1242590	Placeta de Can Garriga				Sarrià-Sant Gervasi				1981-1987